

PAPIER - HANDLUNG

Dr. Josef Stefan

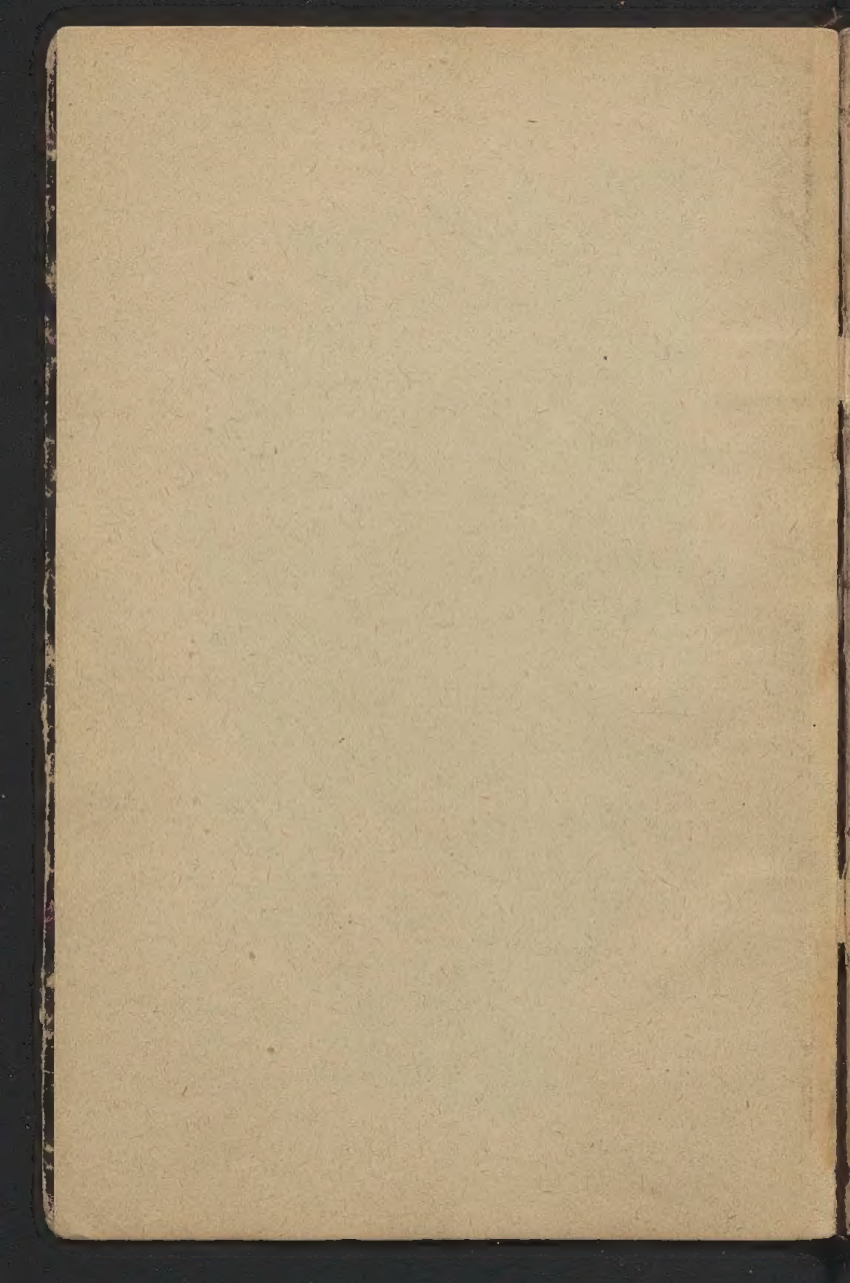
1/ I.

Ausgewählte Capitel aus der
Optik und Wärmelehre.

H.S. 91 Rsmoluchowski

F. POLLY, IV. KAROLINENG. 23.

9444



Erklärung des folgenden Satzes per. Erkl.

C. T. oder 9. u. 12. 1/2 u. 1/2 C. T.

$\overrightarrow{AA'} = \vec{v} \cdot \Delta t = \lambda \left(\frac{v}{c} \cdot \frac{1}{\lambda} \right)$

$\rho = \eta / m \cdot c / \lambda$

$\omega = 2\pi \cdot \text{Zahl der Schwingungen pro Sekunde}$

für λ ist $\lambda = c / \nu$, wobei $\nu = 1 / T$ ist

ist c die Lichtgeschwindigkeit

es ist λ die Wellenlänge (Dispersion)

jetzt ist die Disp. $c = \lambda \cdot \nu$ oder $\nu = c / \lambda$

Erklärung des Diagramms



Winkel α ist

$\sin \alpha = \frac{r}{R}$

oder $\alpha = \arcsin \frac{r}{R}$

$\frac{AA'}{2} = R \cdot \sin \alpha$

$\tau = \frac{AA'}{c}$

jetzt ist τ die Zeit, die das Licht braucht, um von A nach A' zu kommen

oder $\tau = \frac{AA'}{c}$



$$A = \frac{1}{2} \pi$$
$$B = \frac{1}{2} \pi$$
$$C = \frac{1}{2} \pi$$

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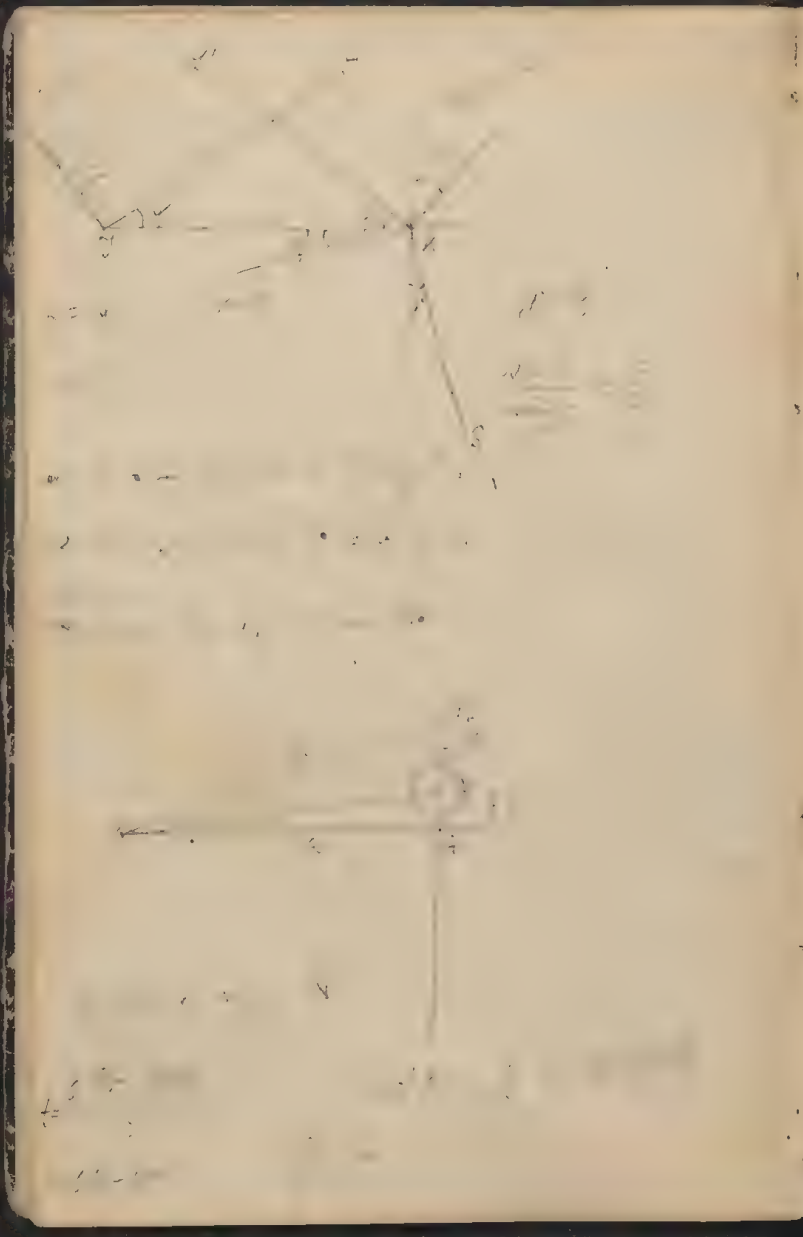
$$A = \frac{1}{2} \pi$$

$$B = \frac{1}{2} \pi$$

$$C = \frac{1}{2} \pi$$

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$$\frac{f(x_0) + f(x_1)}{2} \approx \int_{x_0}^{x_1} f(x) dx$$

$\frac{1}{2} \cdot 1 = \frac{1}{2}$

$$A = \begin{pmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{pmatrix}$$

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$$x^2 = 1$$

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$$\lambda - \mu = \pm \sqrt{a^2 - b^2}$$

$$\lambda + \mu = \pm \sqrt{a^2 - b^2}$$

$$\lambda - \mu = \pm \sqrt{a^2 - b^2}$$

$$\lambda + \mu = \pm \sqrt{a^2 - b^2}$$

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$$x^2 + \frac{1}{x^2} - \frac{2}{x} = 0$$

$$x^2 - \frac{2}{x} + \frac{1}{x^2} = 0$$

$$x = 1$$

$$x = 1$$

$$x = 1$$

$$x^2 + \frac{1}{x^2} - \frac{2}{x} = 0$$

$$x^2 + \frac{1}{x^2} - \frac{2}{x} = 0$$

$$x = \frac{1}{2}$$

$$x = \frac{1}{2}$$



$$x = 1$$



3 E

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1. The first part of the paper is devoted to a general
discussion of the problem. It is shown that the
problem is of great importance and that it has
not been completely solved. The author then
presents a new method for solving the problem.
This method is based on the use of the
variational principle. It is shown that this
method is more accurate than the methods
previously used. The author then applies this
method to the case of a specific problem.
It is shown that the results obtained are in
good agreement with the results obtained by
other methods. The author then discusses the
advantages and disadvantages of the method.
It is shown that the method is very accurate
and that it is easy to use. The author then
concludes that the method is a valuable
tool for solving problems of this type.



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$$\frac{AD}{AE} = \frac{AC}{AE}$$

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$$\frac{AD}{AE} = \frac{AC}{AE}$$

$$= \frac{+OC}{OA} \cdot \frac{1}{\frac{1}{\frac{1}{1+OC}}} = \frac{OC}{OA} \cdot \frac{1}{\frac{1}{1+OC}} =$$

$\frac{1}{2} = \frac{1}{2} + \frac{1}{2}$



1. $\frac{1}{x^2} = x^{-2}$

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3. $\frac{1}{x^3} = x^{-3}$



4. $\frac{1}{x^4} = x^{-4}$

5. $\frac{1}{x^5} = x^{-5}$

$$\frac{1}{x^6} = \frac{1}{x^5} \cdot \frac{1}{x} = x^{-5} \cdot x^{-1} = x^{-6}$$

6. $\frac{1}{x^7} = x^{-7}$

7. $\frac{1}{x^8} = x^{-8}$

8. $\frac{1}{x^9} = x^{-9}$

9. $\frac{1}{x^{10}} = x^{-10}$

$$\frac{1}{x^{11}} = \frac{1}{x^{10}} \cdot \frac{1}{x} = x^{-10} \cdot x^{-1} = x^{-11}$$

10. $\frac{1}{x^{12}} = x^{-12}$

11. $\frac{1}{x^{13}} = x^{-13}$

12. $\frac{1}{x^{14}} = x^{-14}$

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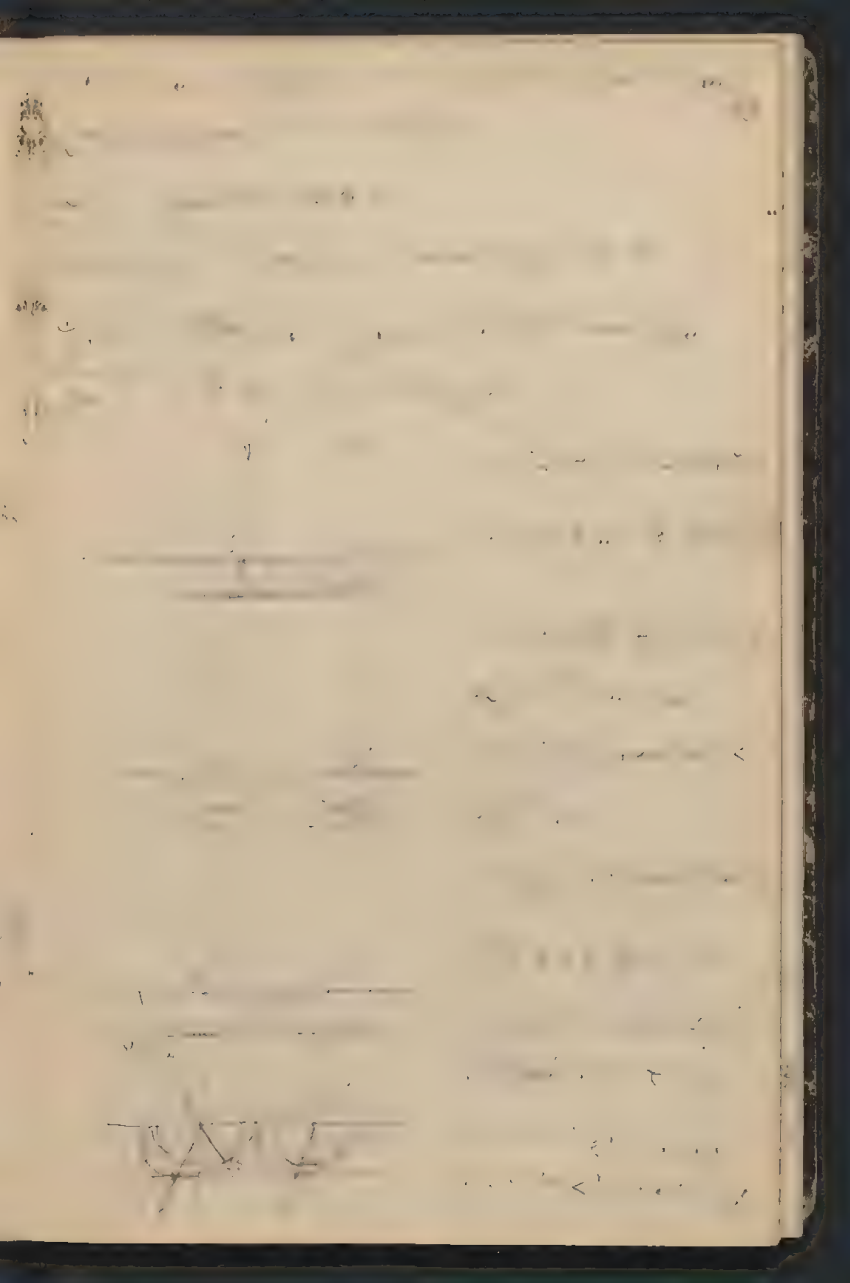
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1. The first part of the paper is devoted to a general
discussion of the problem. It is shown that the
problem is of great importance in the theory of
numbers. The second part is devoted to a
detailed study of the case of a prime number.
The third part is devoted to a study of the
case of a composite number. The fourth part
is devoted to a study of the case of a
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The sixth part is devoted to a study of the
case of a prime power. The seventh part
is devoted to a study of the case of a
composite power. The eighth part is devoted
to a study of the case of a prime power.
The ninth part is devoted to a study of the
case of a composite power. The tenth part
is devoted to a study of the case of a
prime power. The eleventh part is devoted
to a study of the case of a composite power.
The twelfth part is devoted to a study of the
case of a prime power. The thirteenth part
is devoted to a study of the case of a
composite power. The fourteenth part is
devoted to a study of the case of a prime
power. The fifteenth part is devoted to a
study of the case of a composite power.

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$$\left(\begin{array}{c} 1 \\ 2 \end{array} \right) = \frac{1}{2}$$

$$\left(\begin{array}{c} 1 \\ 3 \end{array} \right) = \frac{1}{6}$$

$$\left(\begin{array}{c} 1 \\ 4 \end{array} \right) = \frac{1}{24}$$

$$\left(\begin{array}{c} 1 \\ 5 \end{array} \right) = \frac{1}{120}$$

$$\left(\begin{array}{c} 1 \\ 6 \end{array} \right) = \frac{1}{720}$$

$$\left(\begin{array}{c} 1 \\ 7 \end{array} \right) = \frac{1}{5040}$$

$$\left(\begin{array}{c} 1 \\ 8 \end{array} \right) = \frac{1}{40320}$$

$$\left(\begin{array}{c} 1 \\ 9 \end{array} \right) = \frac{1}{362880}$$

$$\left(\begin{array}{c} 1 \\ 10 \end{array} \right) = \frac{1}{3628800}$$

$$\left(\begin{array}{c} 1 \\ 11 \end{array} \right) = \frac{1}{39916800}$$

$$\left(\begin{array}{c} 1 \\ 12 \end{array} \right) = \frac{1}{479001600}$$

$$\left(\begin{array}{c} 1 \\ 13 \end{array} \right) = \frac{1}{6227020800}$$

$$\left(\begin{array}{c} 1 \\ 14 \end{array} \right) = \frac{1}{87178291200}$$

$$\left(\begin{array}{c} 1 \\ 15 \end{array} \right) = \frac{1}{1307674368000}$$

$$\left(\begin{array}{c} 1 \\ 16 \end{array} \right) = \frac{1}{20901888000000}$$

1872

Jan 1. 1872

Jan 2. 1872

Jan 3. 1872

Jan 4. 1872

Jan 5. 1872

Jan 6. 1872

Jan 7. 1872

Jan 8. 1872

Jan 9. 1872

Jan 10. 1872

Jan 11. 1872

Jan 12. 1872

Jan 13. 1872

1. 2. 3. 4.

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4

$\psi = \frac{1}{\sqrt{2}} (\psi_1 + i\psi_2)$

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$$z = 1$$
$$Z = J^2$$
$$i = 0, 1, \dots, n$$

1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

2. The second part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

3. The third part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

4. The fourth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

5. The fifth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

6. The sixth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

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9. The ninth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

10. The tenth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

11. The eleventh part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

12. The twelfth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

13. The thirteenth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

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1. The first part of the paper is devoted to a review of the literature on the topic of the paper.

1890

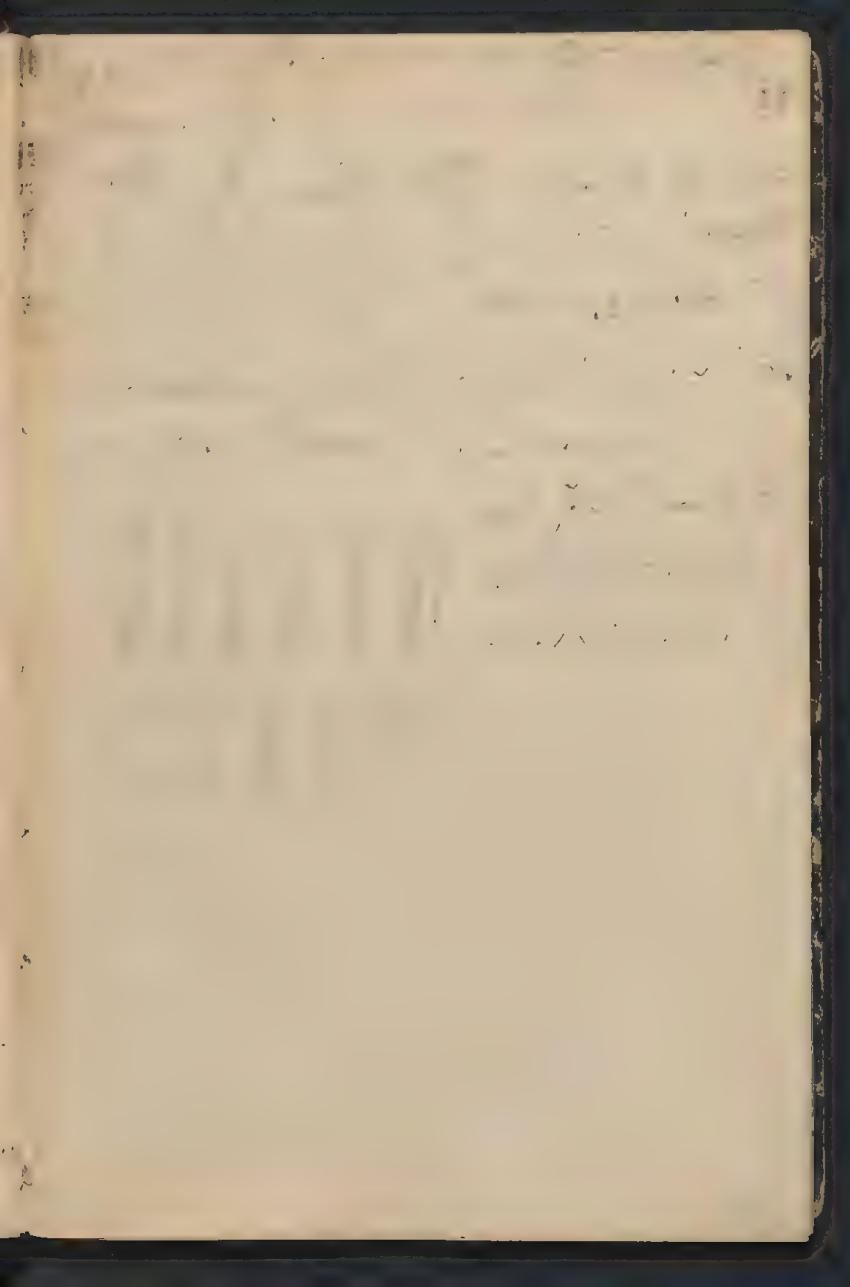
$$x = \frac{1}{2} \sqrt{1 - \frac{1}{2}}$$

$u = 2i, \frac{1}{2} = \frac{1}{2}$ in the

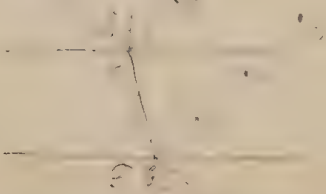
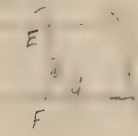
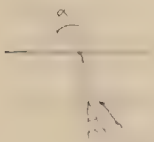
$$\angle C = 118^\circ$$

4. 1. 18

2



1-5



1. $\frac{1}{x^2} = x^{-2}$
 $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

2. $\frac{d}{dx} \frac{1}{x^3} = \frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

3. $\frac{d}{dx} \frac{1}{x^4} = \frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

4. $\frac{d}{dx} \frac{1}{x^5} = \frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

5. $\frac{d}{dx} \frac{1}{x^6} = \frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$

6. $\frac{d}{dx} \frac{1}{x^7} = \frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$

7. $\frac{d}{dx} \frac{1}{x^8} = \frac{d}{dx} x^{-8} = -8x^{-9} = -\frac{8}{x^9}$

8. $\frac{d}{dx} \frac{1}{x^9} = \frac{d}{dx} x^{-9} = -9x^{-10} = -\frac{9}{x^{10}}$

9. $\frac{d}{dx} \frac{1}{x^{10}} = \frac{d}{dx} x^{-10} = -10x^{-11} = -\frac{10}{x^{11}}$

$$\ddot{y} = \frac{1}{m} \left[\frac{1}{2} \frac{d^2}{dt^2} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) - c \right]$$

$$\frac{y}{c} =$$

$$T = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

$$= \frac{c}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{c}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

$$T = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

$$T = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

$$x =$$

$$T = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

$$= \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right) = \frac{2\pi}{\omega} \left(\frac{1}{2} \frac{d^2}{dt^2} \right)$$

.....T

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..... $\cos \theta = \frac{1}{2} \left(1 - \frac{1}{2} \right)$

..... $\epsilon_0 - \epsilon$

A

..... $\epsilon_0 - \epsilon$

..... $\frac{1}{2} \left(1 - \frac{1}{2} \right)$

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$$\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} \frac{d}{dt} \right) = u$$

12 10 10 45

[Faint handwritten notes at the bottom of the page]

$$= \frac{1}{n} \sum_{i=1}^n x_i$$

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

$$= \frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

- 1 -

$$\bar{\varphi}_i = r_i$$

$$f^2 = \frac{1}{2} \omega^2 \left(\frac{1}{\omega^2} \right) = \frac{1}{2} \omega^2 \cdot \frac{1}{\omega^2} = \frac{1}{2}$$

[illegible]

$-2 \cdot 0.9 = -1.8$

$$= 2.14 + \frac{1}{2} \cdot 2.14 \cdot 2.14 = 2.14 + 2.29 = 4.43$$

As a result of the



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3. $\cos^2 \theta$

4. $E_1 - E_2 = 0$

5. $\frac{1}{2} \cos^2 \theta$

6. $u^2 + 2uv + v^2$

7. $1 + 2\cos \theta + \cos^2 \theta$

8. $A^2 = a^2 \cos^2 \theta + b^2 \sin^2 \theta$

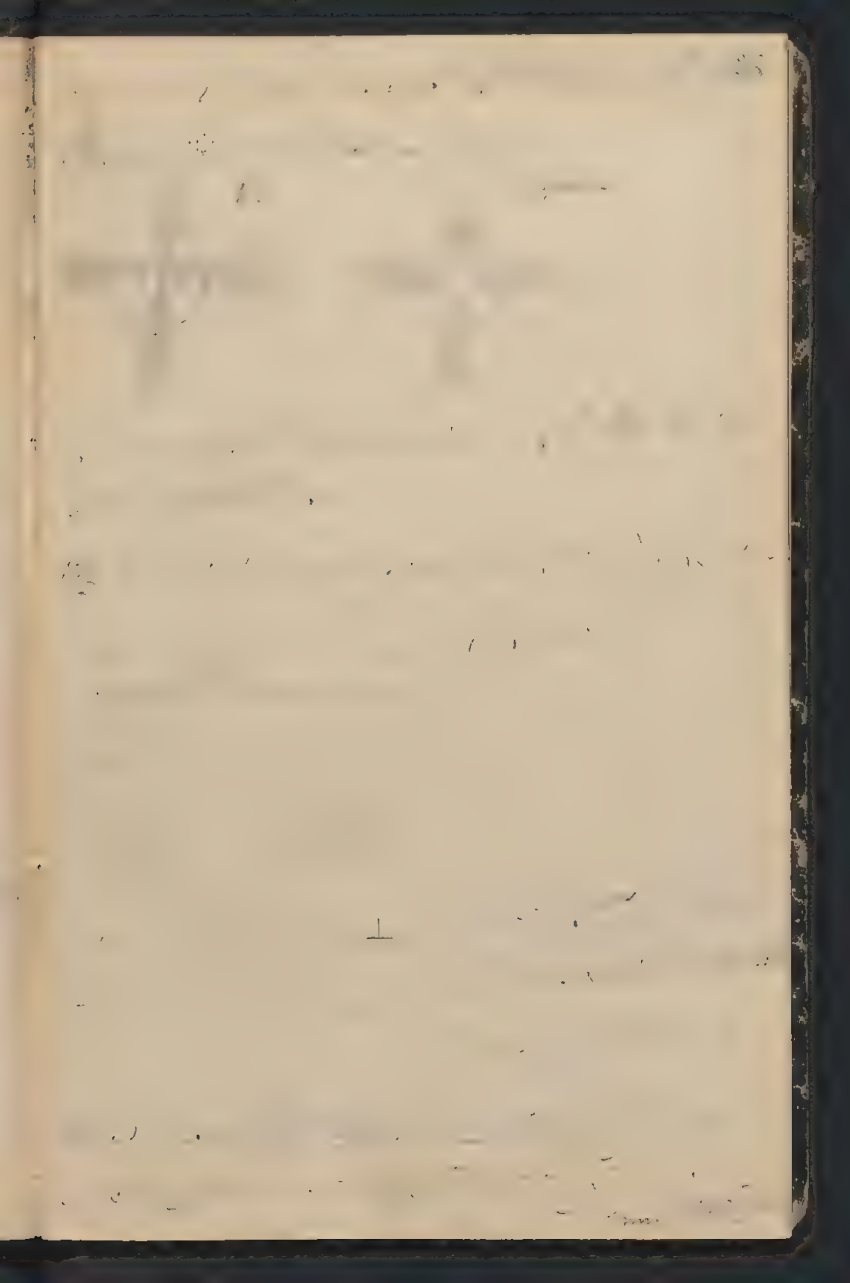
$= a^2 - a^2 \sin^2 \theta + b^2 \sin^2 \theta$

1871
 1872
 1873



The above
 is a plan
 of the
 building

The building is
 situated on
 the corner of
 the street
 and the
 river
 and is
 a very
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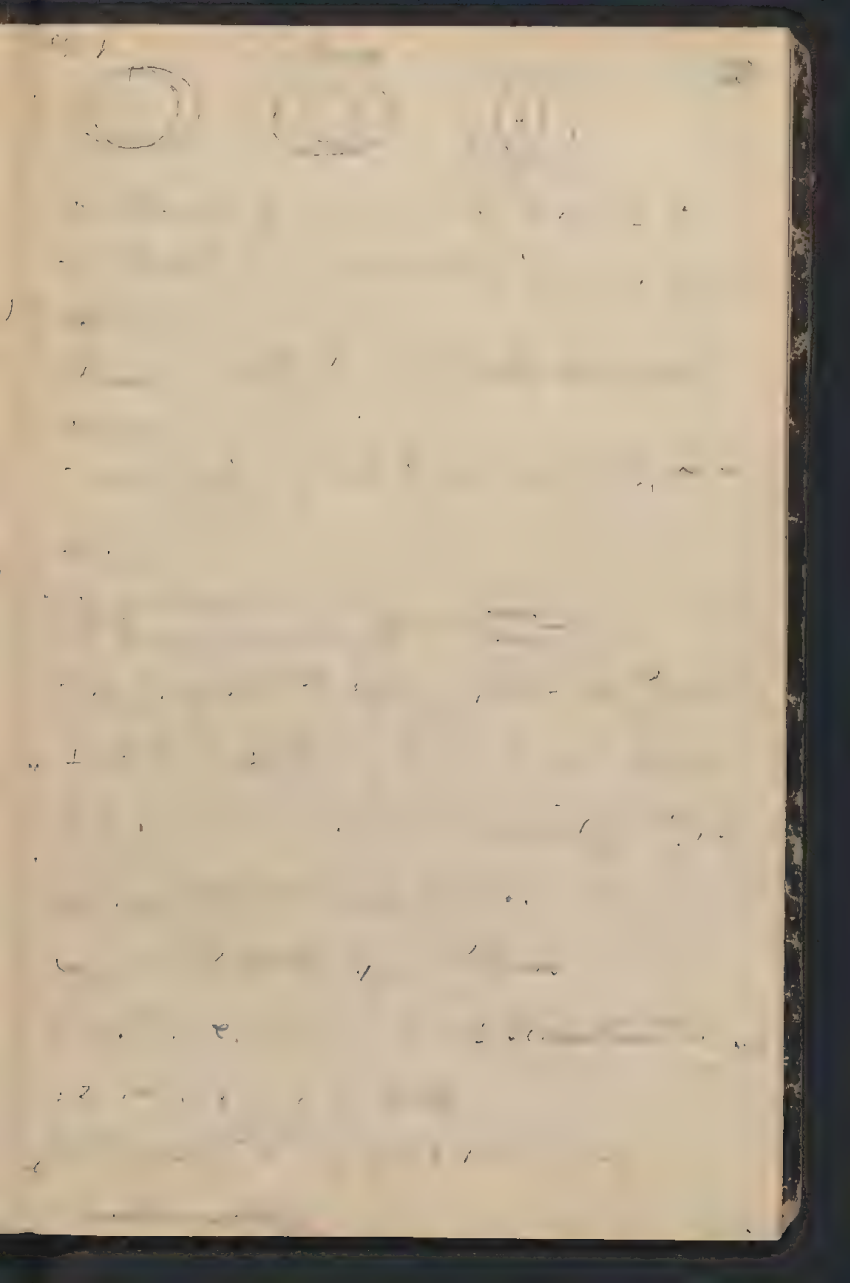
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$$\begin{aligned}
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 &= \dots \dots \dots
 \end{aligned}$$

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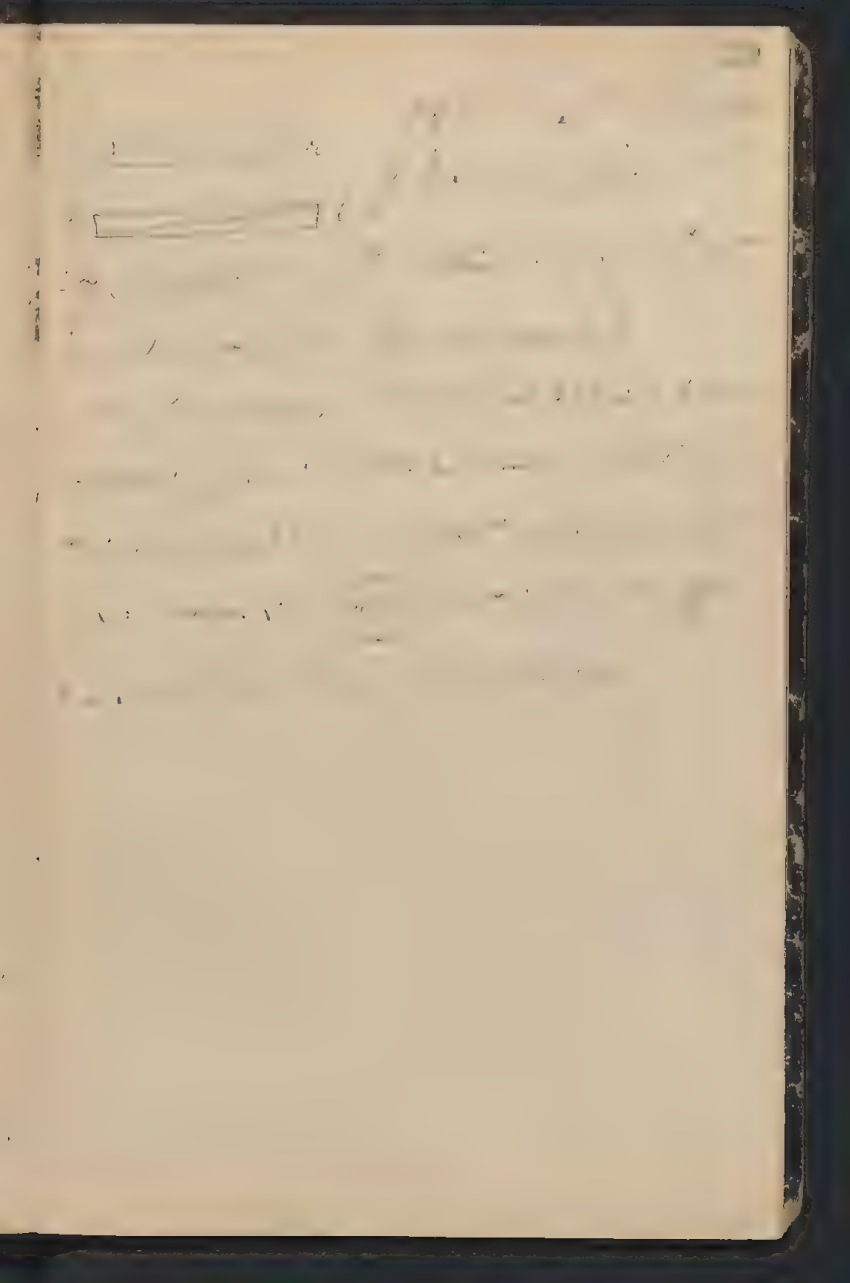
1891

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[Faint, illegible handwritten text, likely bleed-through from the reverse side of the page.]



(5)

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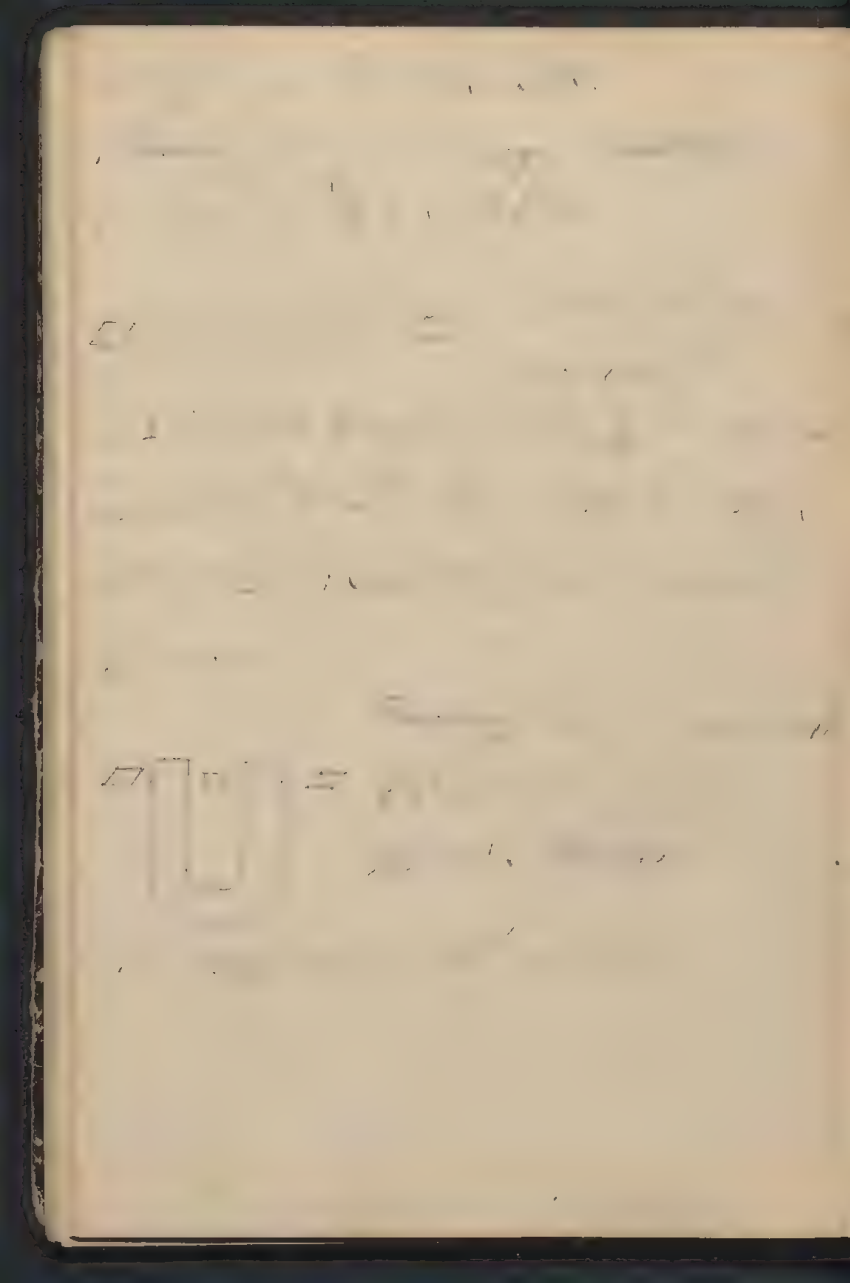
7 = 1 + 4

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$$A = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$A$$

$$T$$

$$V$$

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1. $\frac{d}{dt} \log t$

$$= \frac{1}{t}$$

$$x^n = \frac{d^n}{dx^n} x^n$$

...

$$x^n = \frac{d^n}{dx^n} x^n$$

$$x^n = \frac{d^n}{dx^n} x^n$$

$$\frac{d^n}{dx^n} x^n = \frac{d^n}{dx^n} \frac{d^n}{dx^n} x^n = \frac{d^{2n}}{dx^{2n}} x^n$$

...

2-11

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$$+ \dots - \frac{d^2}{dt^2} \dots -$$

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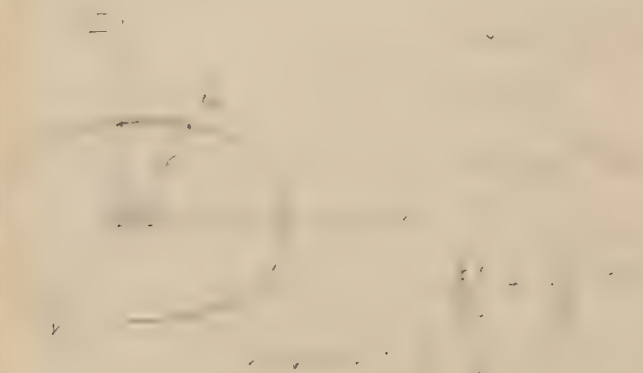
$$\lambda \dots = \lambda'$$

$$\dots \lambda \dots = T^2$$

1-1

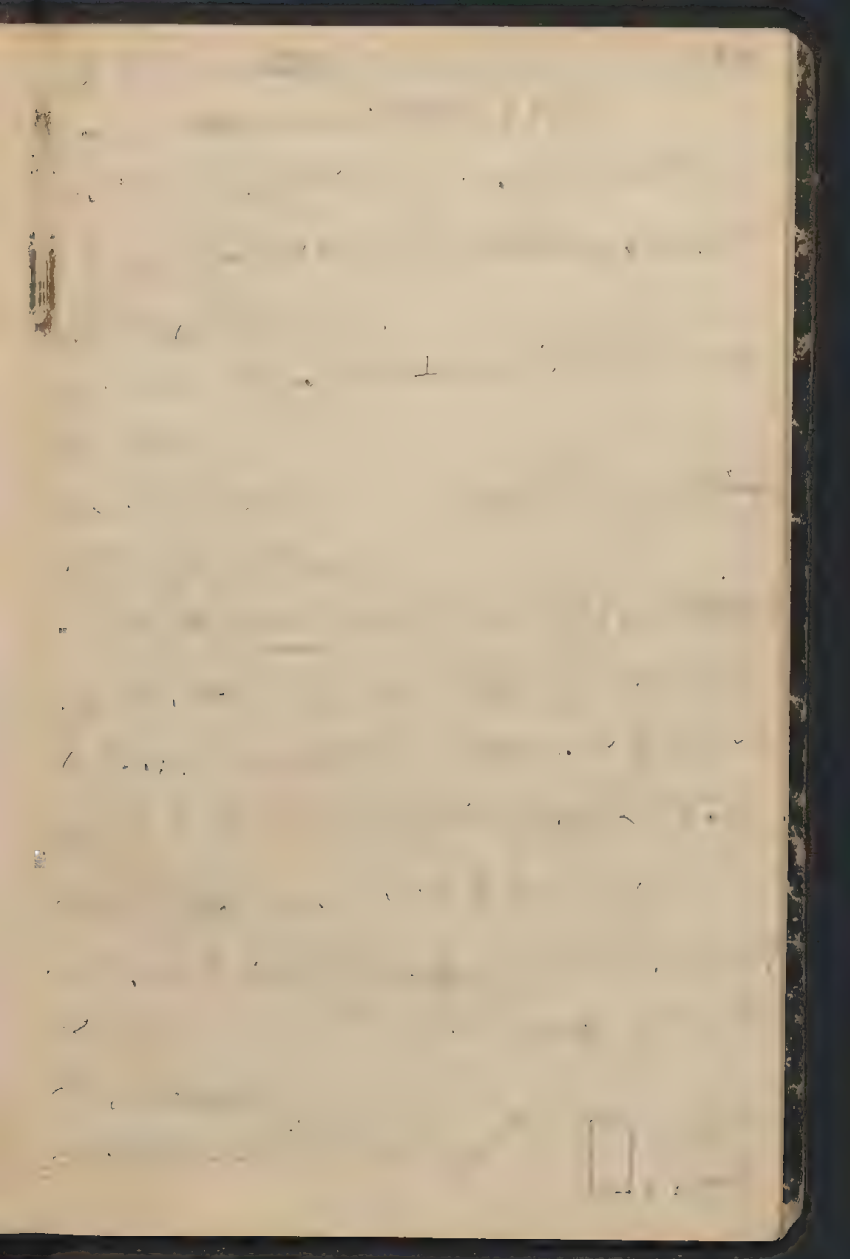
1-1

1-1 X



The first of the birds seen
 was a large crane or heron
 standing in the water. It
 was very light in color and
 appeared to be a pencil sketch
 or a very faded print.

The second bird was a
 smaller one, possibly a
 duck or a goose, also
 standing in the water. It
 was also very light in color
 and appeared to be a pencil
 sketch or a very faded print.



$$T = X - \frac{1}{2} \frac{d^2 X}{dt^2}$$

$$X = \frac{1}{2} \frac{d^2 T}{dt^2}$$

$$X = \frac{1}{2} \frac{d^2 T}{dt^2}$$

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$$X = \frac{1}{2} \frac{d^2 T}{dt^2}$$

11.11.1911

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1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

— 1 —

$a = b = c$

$1^2 + 2^2 + 3^2 + \dots + n^2$

$\frac{n(n+1)(2n+1)}{6}$

$\frac{n}{2}$

m
 $\frac{m}{2}$

$\frac{1}{2}$

$\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}$

1

α

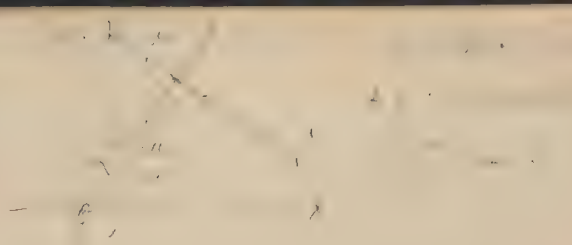
$$\frac{1}{\alpha} - \frac{1}{\alpha^2} = \frac{\alpha - 1}{\alpha^2}$$

$$= \frac{1}{\alpha} - \frac{1}{\alpha^2} = \frac{\alpha - 1}{\alpha^2}$$

$$= \frac{1}{\alpha} - \frac{1}{\alpha^2} = \frac{\alpha - 1}{\alpha^2}$$

$$= \frac{1}{\alpha} - \frac{1}{\alpha^2} = \frac{\alpha - 1}{\alpha^2}$$

$$= \frac{1}{\alpha} - \frac{1}{\alpha^2} = \frac{\alpha - 1}{\alpha^2}$$



1. $\angle A = \angle B$ (given)

" $\angle C = \angle D$ (given)
 $\therefore \triangle ABC \cong \triangle DEF$ (ASA)

" $\angle E = \angle F$ (given)

" $\angle G = \angle H$ (given)

" $\angle I = \angle J$ (given)

" $\angle K = \angle L$ (given)
 $\therefore \triangle GHI \cong \triangle JKL$ (ASA)

2. $\angle M = \angle N$ (given)

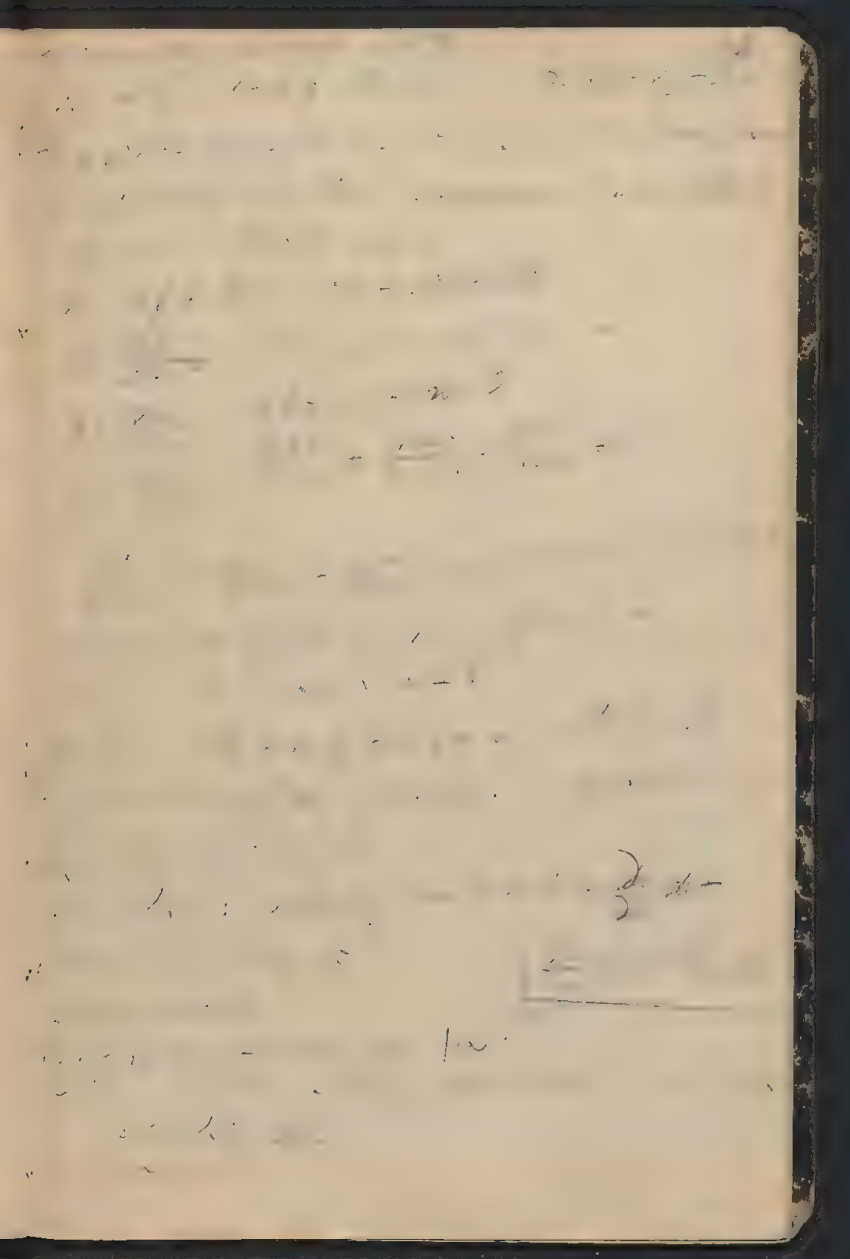
" $\angle O = \angle P$ (given)

" $\angle Q = \angle R$ (given)

" $\angle S = \angle T$ (given)



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$$Dy = \frac{1}{x} \left(\frac{1}{x} + \frac{1}{x^2} \right) = \frac{1}{x^2} + \frac{1}{x^3}$$

$$Dy = \frac{1}{x^2} + \frac{1}{x^3}$$

$$x = \frac{1}{y} \Rightarrow \frac{1}{y} = \frac{1}{x^2} + \frac{1}{x^3}$$

$$\frac{1}{y} = \frac{1}{x^2} + \frac{1}{x^3} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$\frac{1}{y} = \frac{x + 1}{x^3}$$

$$\frac{1}{y} = \frac{x + 1}{x^3} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

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$$\frac{1}{y} = \frac{x + 1}{x^3} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$(Dy = m) \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$x = \frac{1}{y} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$x = \frac{1}{y} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$x = \frac{1}{y} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$x = \frac{1}{y} \Rightarrow \frac{1}{y} = \frac{x + 1}{x^3}$$

$$- \frac{1}{2} \left[\frac{1}{x^2} - \frac{1}{x^3} \right]$$

$$x^2 - \frac{1}{x} = 0$$

$$- \frac{1}{x}$$

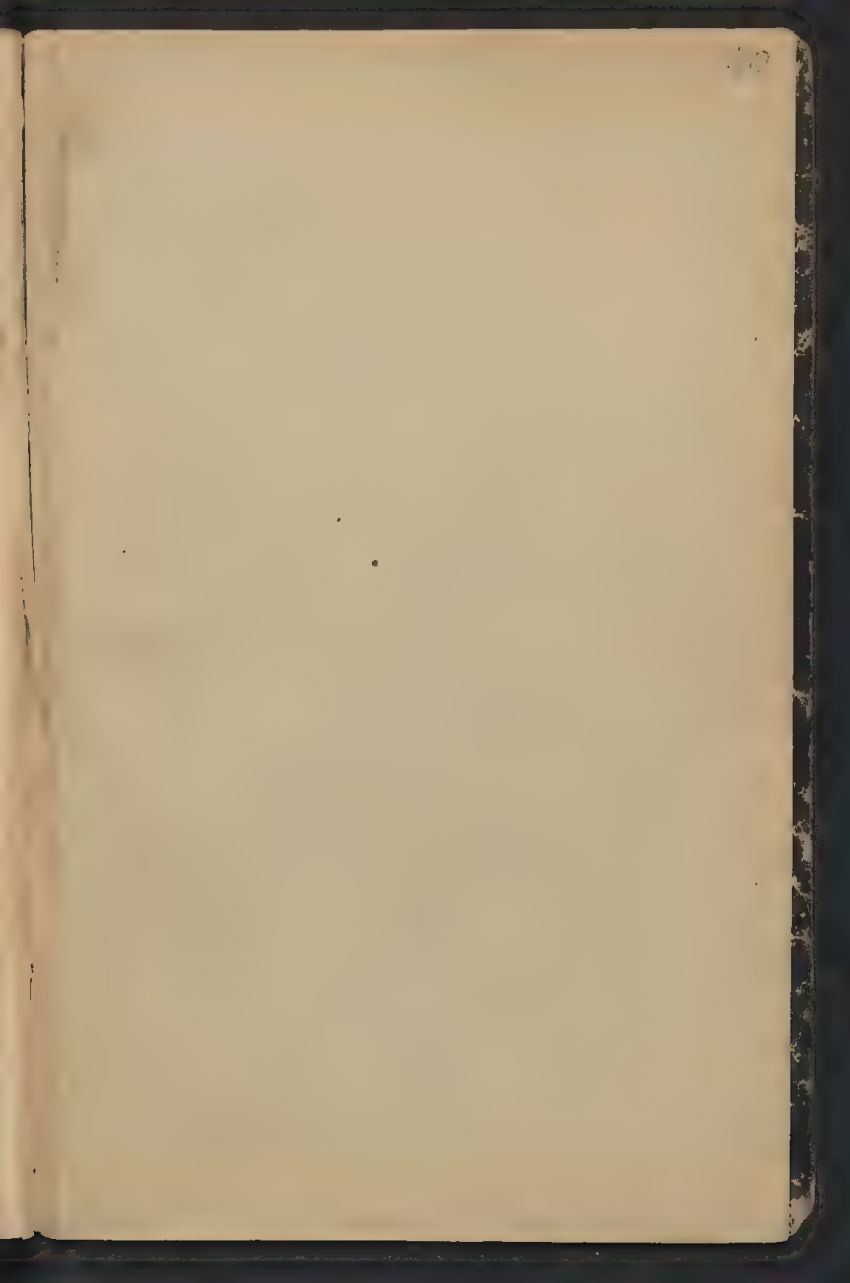
$$u^2 - \frac{1}{u} =$$

$$= \frac{1}{u^2} - \frac{1}{u^3} = \frac{1}{u^3} \left[u - 1 \right]$$

$$= \frac{1}{u^3} \left[\frac{1}{u} - 1 \right] = \frac{1}{u^4} - \frac{1}{u^3}$$

$$= \frac{1}{u^4} - \frac{1}{u^3} = \frac{1}{u^4} \left[1 - u \right]$$

$$= \frac{1}{u^4} \left[1 - \frac{1}{u} \right] = -\frac{1}{u^5}$$



45
Scripta universit.





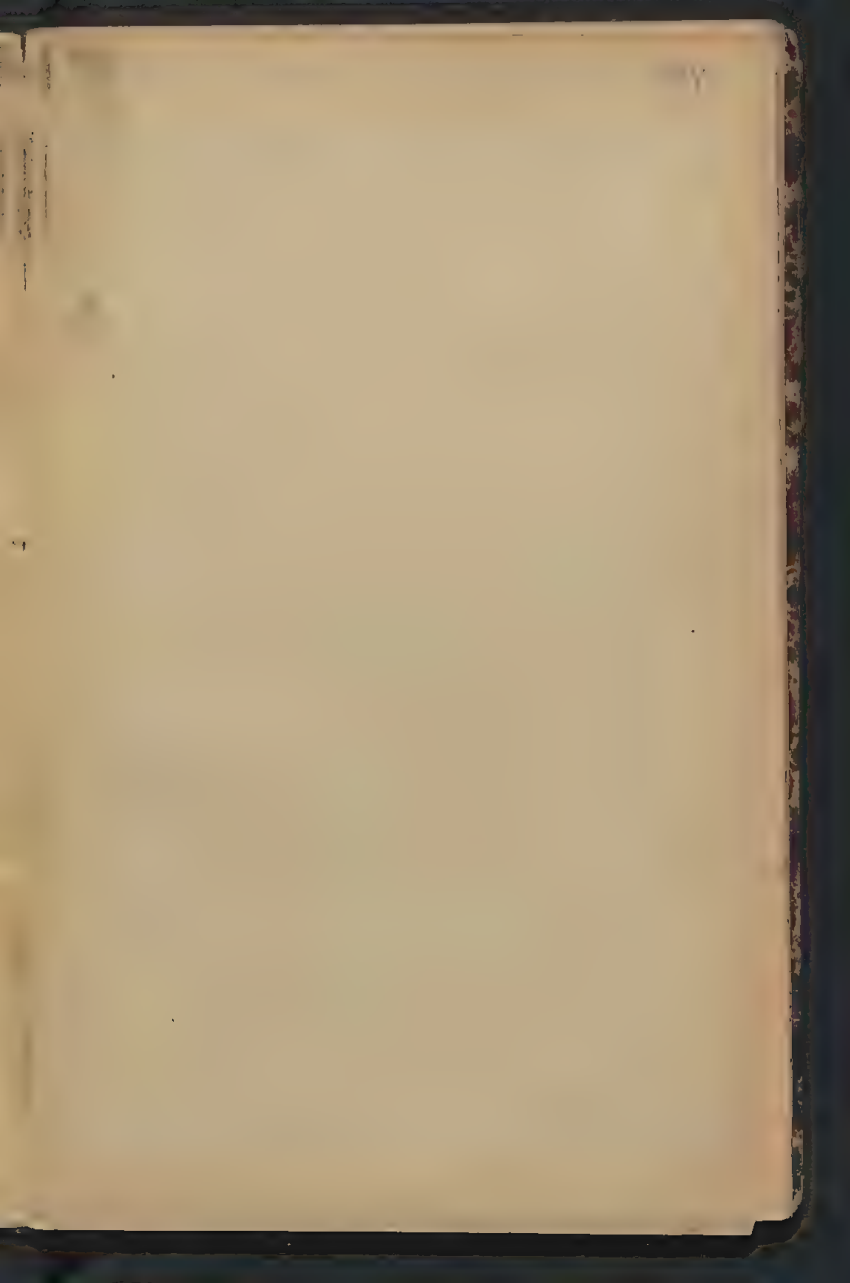
PETER HANAUER

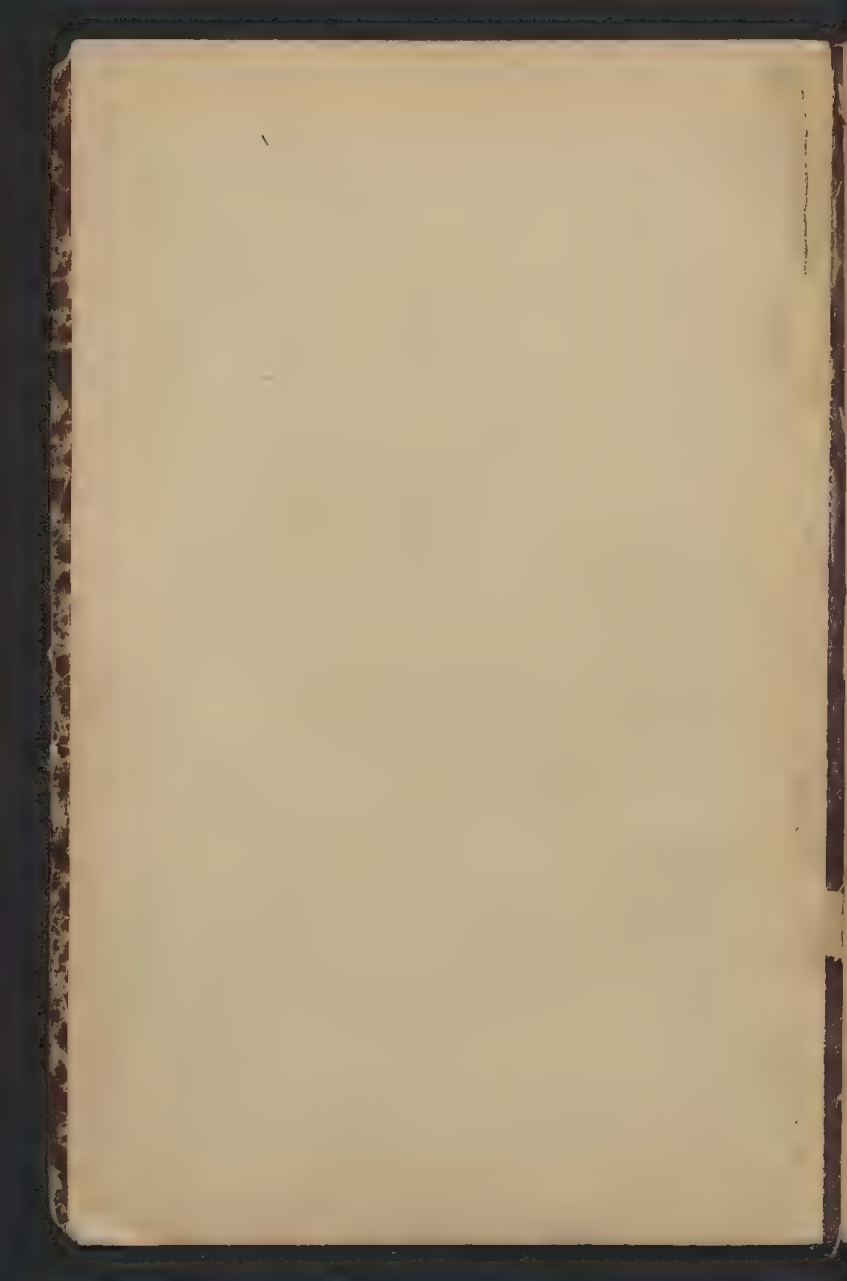
Dr. Josef Stefan 1. II.

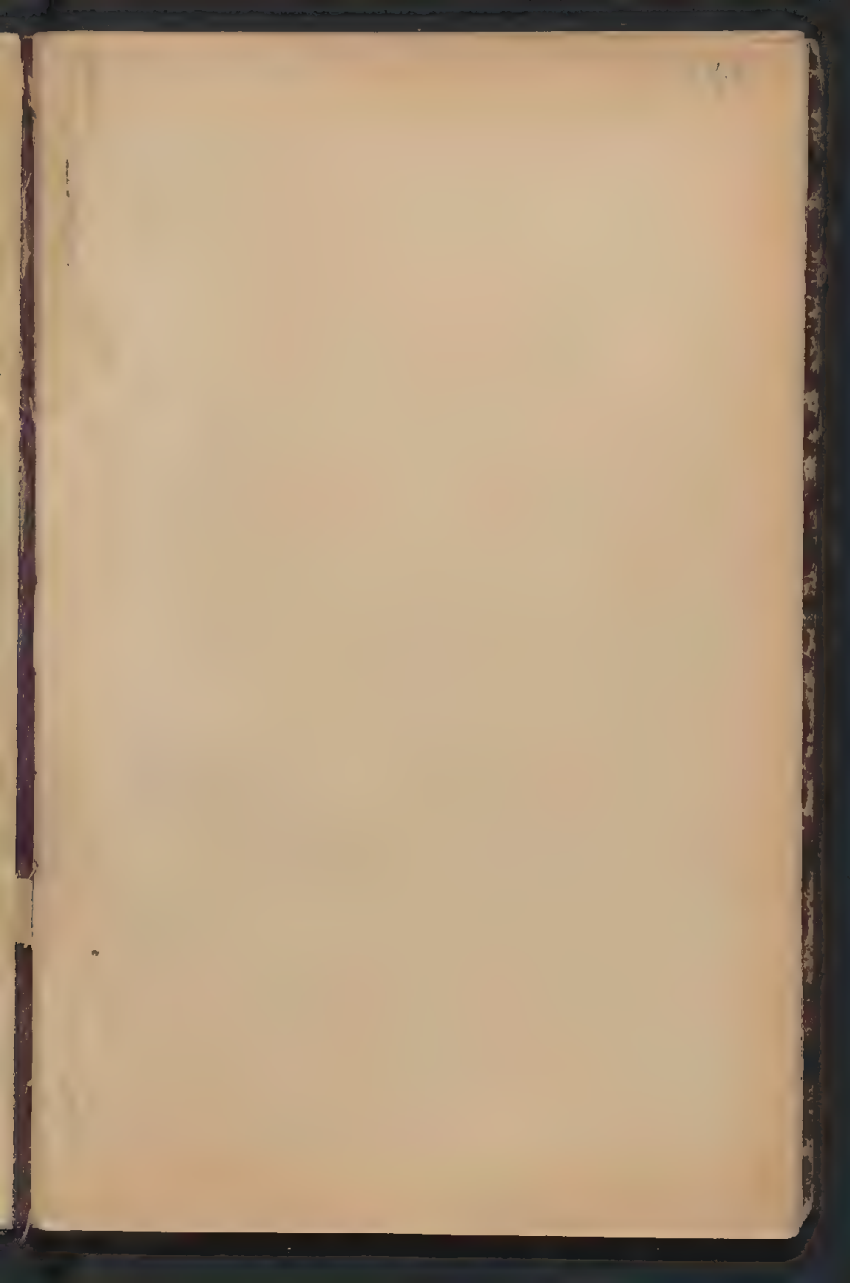
Ausgewählte Capitel aus der
Optik und Wärmelehre.

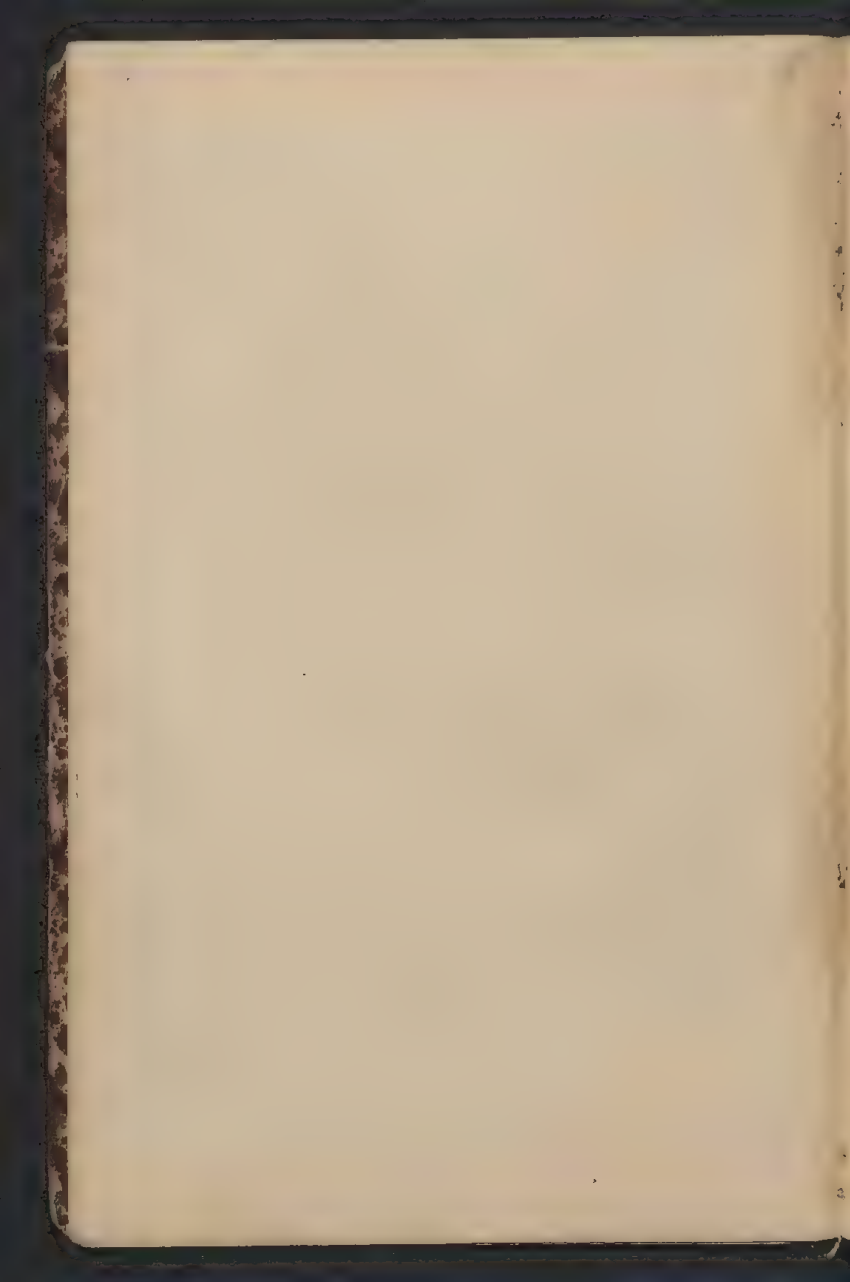
H. S. H. Schmoluchowski

POLLY. IV. KAROLINER









5/6



4/5

$$1 < \pi < 2$$

$$m = \dots$$

$$m = \dots$$

$$T = \dots$$

$$T = \dots$$

$$P T_{\dots} = \dots = 1 - \frac{1}{T}$$

$$N = T_{\dots} = \frac{1}{T}$$

$$T = \dots$$

$$= \frac{T^2 - 1}{N}$$

$$T = \dots$$

$$T = \dots$$

$$T = \dots = \frac{1}{T}$$

$$T = \dots$$

$$T = \dots$$

$$= \dots$$

$$T = \dots$$

$$T = \dots$$

$$\frac{2}{2^2 - 1} = \dots$$

$$\frac{2}{2^2 - 1} + \dots$$

$\frac{x^2}{2} - \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

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$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

$$1 = \frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

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$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$

$\frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2}$



Y



$$X = Y$$

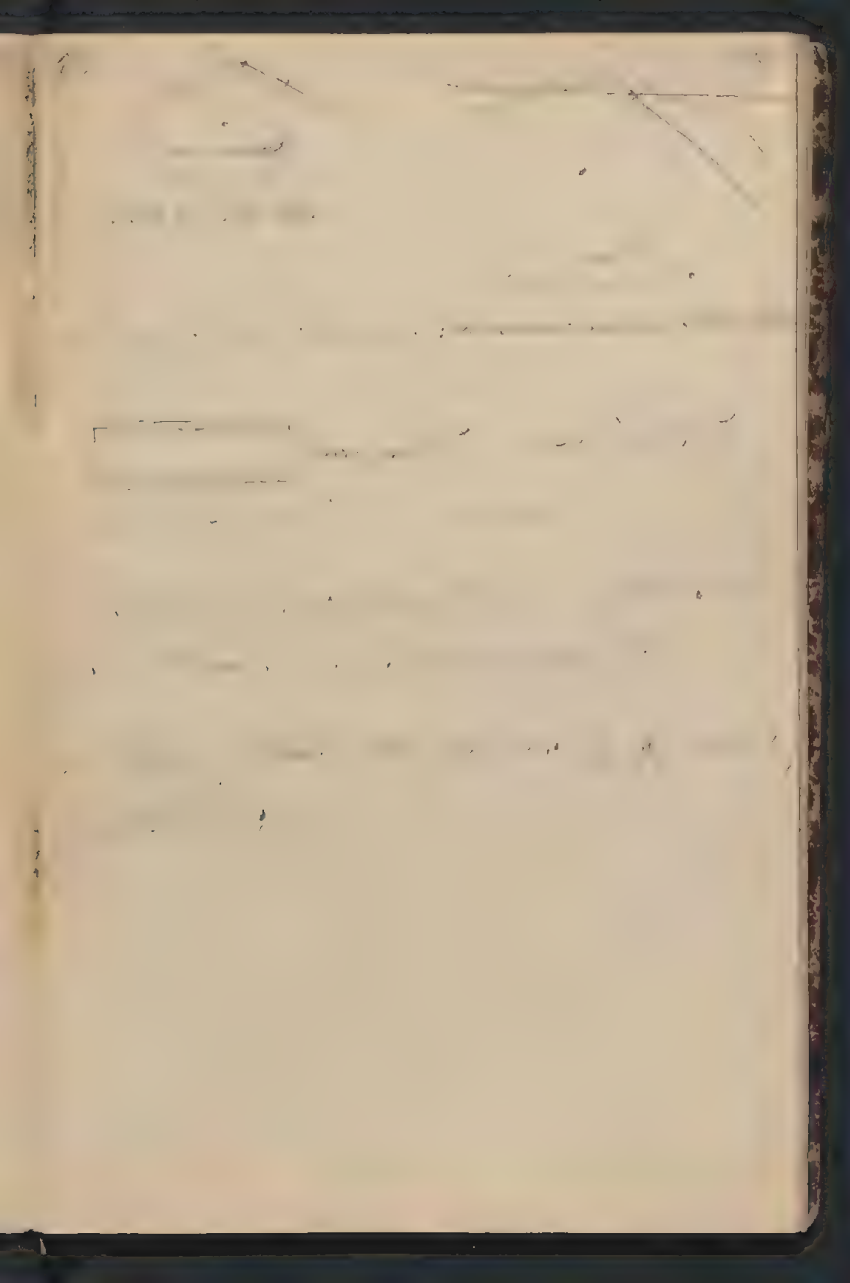
+ c.c. + c.c. + c.c.

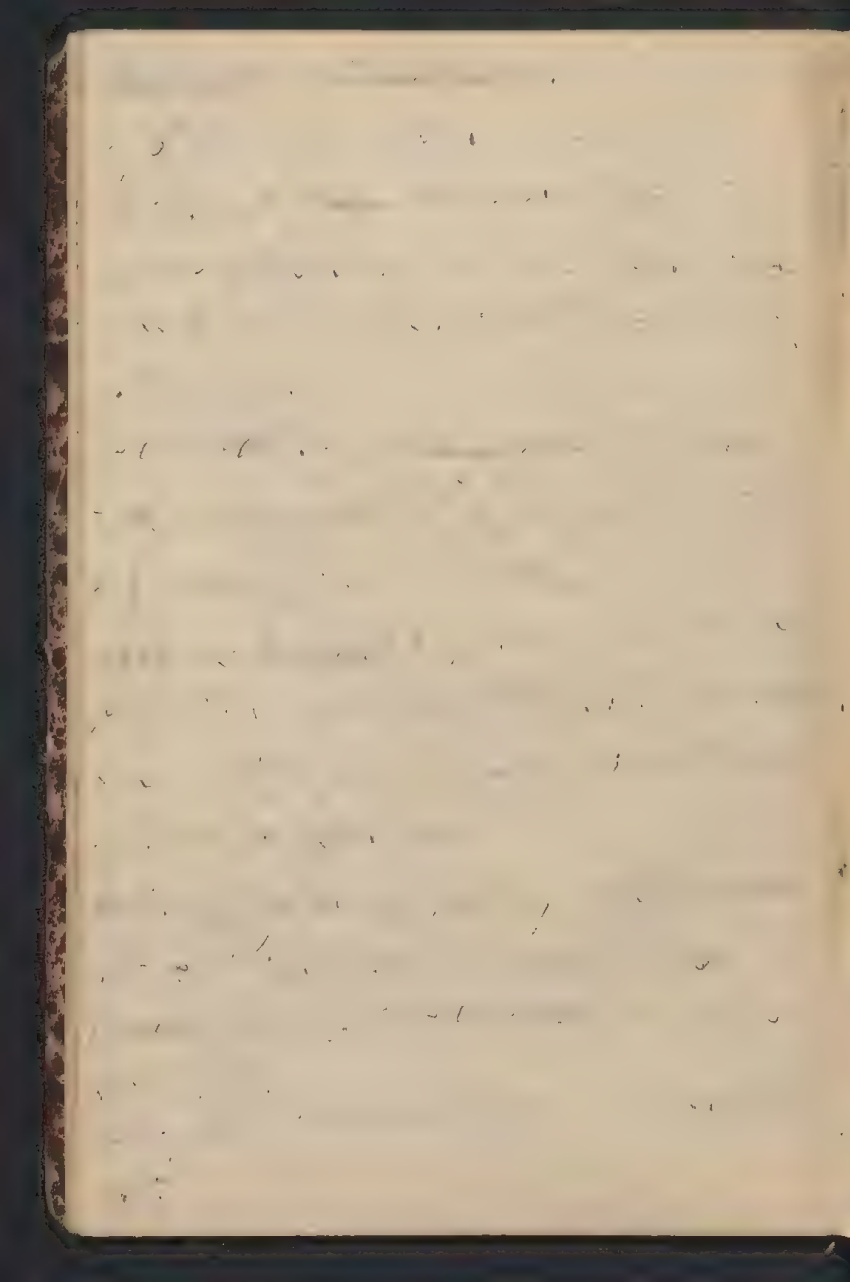
Handwritten notes at the top of the page, possibly including a title or introductory text.



Main body of handwritten text, appearing as several lines of cursive script, though the ink is very light and difficult to read.

Two horizontal lines at the bottom of the page, likely serving as a signature line or a separator.





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1. 11/17 - 1917

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$$19. \frac{1}{2} - \frac{1}{4} = \frac{1}{4}$$

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21. 10/12 - 10/12 = 0

22. 10/12

23. 10/12

24. 10/12

$$25. \frac{1}{2} + \frac{1}{4} = \frac{3}{4}$$

$$26. \frac{1}{2} - \frac{1}{4} = \frac{1}{4}$$

27. 10/12

28. 10/12

$$29. \frac{1}{2} + \frac{1}{4} = \frac{3}{4}$$

30. 10/12

$$31. \frac{1}{2} - \frac{1}{4} = \frac{1}{4}$$

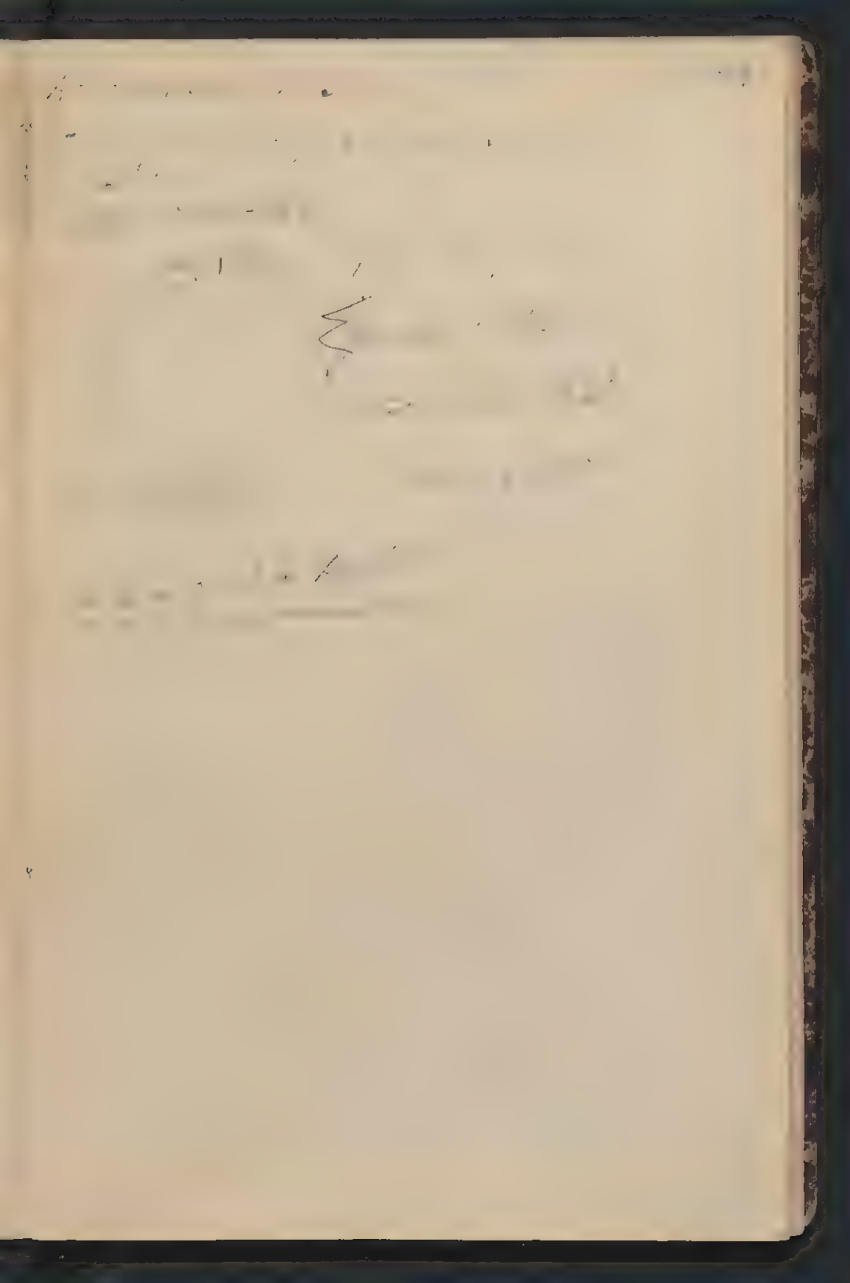
32. 10/12

The first part of the paper is devoted to a discussion of the general principles of the theory of the α -particle. It is shown that the α -particle is a composite particle, consisting of two protons and two neutrons, and that it is a very stable particle, with a long life-time.

The second part of the paper is devoted to a discussion of the experimental results of the α -particle. It is shown that the α -particle has a very high penetrating power, and that it is very difficult to detect. The results of the experiments are compared with the theoretical predictions, and it is found that they are in good agreement.

The third part of the paper is devoted to a discussion of the applications of the α -particle. It is shown that the α -particle can be used as a source of energy, and that it can be used in the treatment of cancer. The results of the experiments are compared with the theoretical predictions, and it is found that they are in good agreement.

In conclusion, it is shown that the α -particle is a very important particle, and that it has many applications. The results of the experiments are compared with the theoretical predictions, and it is found that they are in good agreement.



T

1000

$$\frac{dE}{dt} = \dots$$

?

$$\frac{d^2}{dt^2} = \dots$$

$$\frac{d^3}{dt^3} = \dots$$

3-11

$$\dots +$$

$$\dots$$

$$\dots$$

3-12

$$C = \dots$$

$$\dots = \dots$$

$$\dots$$

$$\dots$$

$$\dots$$

$$\frac{1}{T} = \frac{c}{\lambda} = \dots$$

$$\begin{aligned}
 & \dots \\
 & \dots \\
 & \dots T^c \dots \\
 & \dots - c \dots \quad \text{I.}
 \end{aligned}$$

$$\dots = c + AK(1 - \alpha)T - \dots$$

$$\dots = \dots \dots \dots$$

$$\dots = c + AK(1 - \alpha)T - \dots$$

$$\dots C_{\text{II}} - C_{\text{I}} \dots$$

$$\frac{dL}{dt} = \dots \frac{1}{C - c} \quad \text{II}$$

$$dL = \dots$$

$$\frac{dL}{dt} = C_1 \dots$$

$$\dots = \dots \quad \text{III}$$

T_c

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T_2

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

T

$T = T_0 + \Delta T$

$\sim (T_0 + \Delta T)$

$T_0 + \Delta T$

$t = \dots$

$$\frac{a^2}{b^2} = \frac{a}{b} \cdot \frac{a}{b}$$

$$a^2 = b^2$$

$$a = b$$

$$a^2 = b^2$$

$$a^2 = b^2 \quad \frac{a}{b} = \frac{a}{b} \quad \frac{a}{b} = \frac{a}{b}$$

$$a^2 = b^2$$

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$$\frac{a^2}{b^2} = \frac{a}{b} \cdot \frac{a}{b} = \frac{a}{b} \cdot \frac{a}{b}$$

$$\frac{a^2}{b^2} = \frac{a}{b} \cdot \frac{a}{b}$$

$$a^2 = b^2$$

$$a^2 = b^2$$

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$$y_2 = \frac{1}{2} \left(\frac{1}{\sqrt{1-\epsilon^2}} - \frac{1}{\sqrt{1-\epsilon'^2}} \right)$$

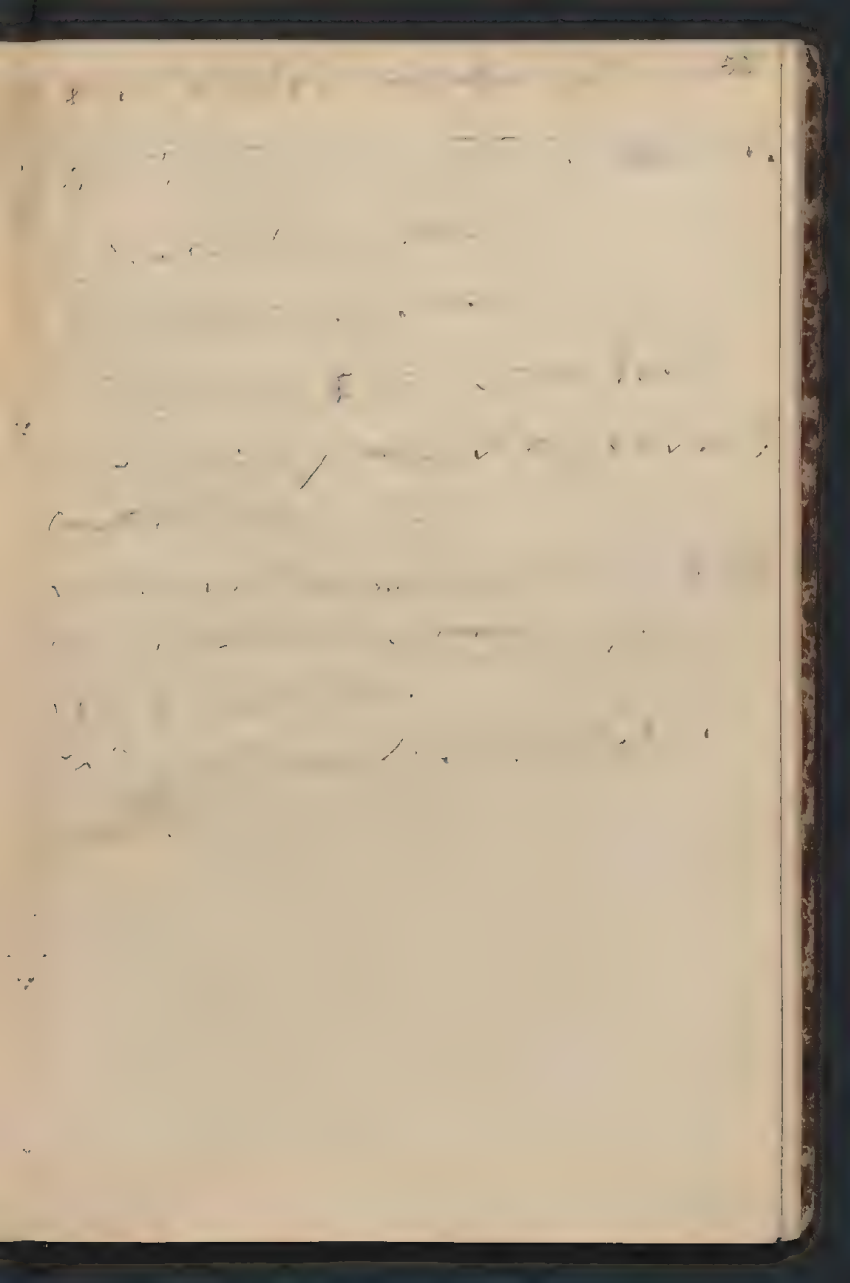
$$= \frac{1}{2} \left(\frac{1}{\sqrt{1-\epsilon^2}} - \frac{1}{\sqrt{1-\epsilon'^2}} \right)$$

$$y_1 = \frac{1}{2} \left(\frac{1}{\sqrt{1-\epsilon^2}} + \frac{1}{\sqrt{1-\epsilon'^2}} \right)$$

$$y_1 = \frac{1}{2} \left(\frac{1}{\sqrt{1-\epsilon^2}} + \frac{1}{\sqrt{1-\epsilon'^2}} \right)$$

$$y_1 = \frac{1}{2} \left(\frac{1}{\sqrt{1-\epsilon^2}} + \frac{1}{\sqrt{1-\epsilon'^2}} \right)$$

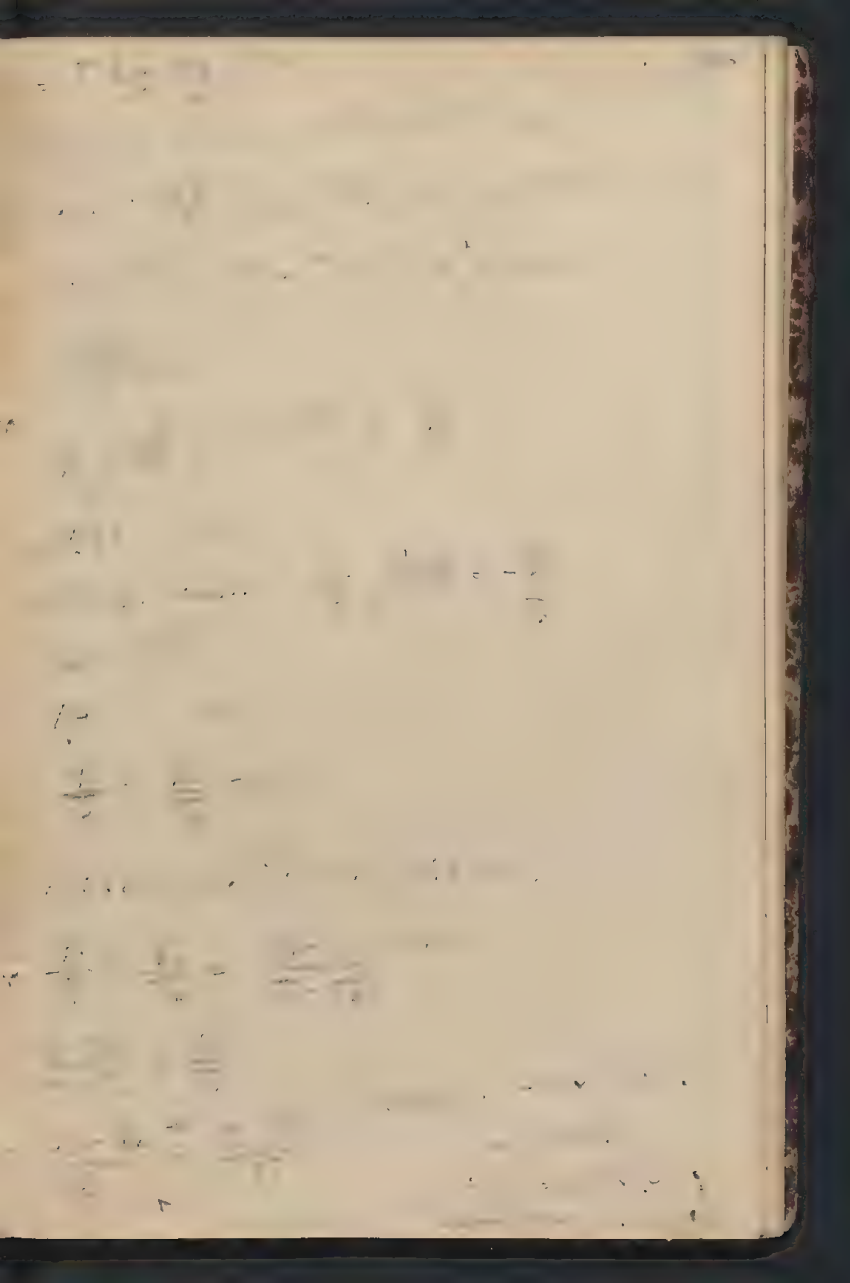
$$\frac{T_2}{T_1} = \frac{1-\epsilon}{1+\epsilon} = \frac{1-\epsilon'}{1+\epsilon'}$$



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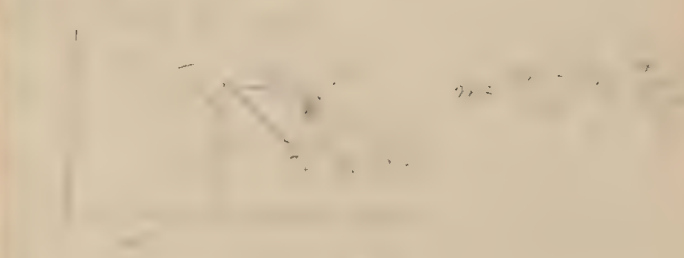
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$$\frac{1}{T} = \frac{1}{T_0} + \frac{1}{T_1}$$

where



Let T_0 be the time taken for the first part of the journey and T_1 be the time taken for the second part of the journey. Then the total time taken for the journey is $T = T_0 + T_1$.

Let v_0 be the speed in the first part of the journey and v_1 be the speed in the second part of the journey. Then the distance covered in the first part of the journey is $d_0 = v_0 T_0$ and the distance covered in the second part of the journey is $d_1 = v_1 T_1$.

Let d be the total distance covered in the journey. Then $d = d_0 + d_1 = v_0 T_0 + v_1 T_1$. Substituting $T = T_0 + T_1$ into this equation, we get $d = v_0 T_0 + v_1 (T - T_0)$. Rearranging this equation, we get $d = v_1 T + (v_0 - v_1) T_0$.

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Handwritten notes, mostly illegible. Some words like "The" and "and" are visible.

Handwritten notes, mostly illegible. Some words like "The" and "and" are visible.

$$\frac{1}{2} = \frac{1}{2} \quad \frac{1}{2} = \frac{1}{2} \quad \frac{1}{2} = \frac{1}{2}$$

$$\frac{1}{2} = \frac{3}{6} - \frac{1}{6}$$

$$= \frac{2}{6} = \frac{1}{3}$$

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1-18

$$A = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad B = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$C = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad D = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$E = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad F = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$G = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad H = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$I = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad J = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$K = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad L = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$M = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad N = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$O = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad P = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$Q = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad R = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$S = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad T = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$U = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad V = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$W = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad X = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$Y = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad Z = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$-ct = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad \dots$$

$$\dots$$

$$\dots$$

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$$\begin{array}{r} 53 \\ 175 \end{array}$$

$$2' 12$$

$$4' 62$$

$$2' 8$$

$$\begin{array}{r} 2' 8 \\ \hline 2' 8 \end{array}$$

$$2' 1$$

$$2' 56$$

$$8' 61$$

$$8' 61$$

$$7' 52$$

$$u-u' = 1648$$

173

152

111

115

17

21 2000

311

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A

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18 1.45 115

2.10

5.50

[Faint, illegible handwriting throughout the page]

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... (...)

$$I = p \cdot u \cdot A = n \cdot e$$

$$I = n \cdot e \cdot T$$

$$I = n \cdot e \cdot T$$

$$n = n' \cdot T$$

$$n \cdot T = n' \cdot T = n' \cdot T = n' \cdot T$$

$$n = n' \cdot T$$

$$I = 5.5 \cdot 10^{-10} \cdot 1.6 \cdot 10^{-19} \cdot 1.5 \cdot 10^{10}$$

1880 - 1881

1881 - 1882

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1885 - 1886

1886 - 1887

1887 - 1888

1888 - 1889

1889

1890 - 1891

1891 - 1892

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1893 - 1894

1894 - 1895

1895 - 1896

1896 - 1897

$$l = 81$$

$$T = 241$$

$$\frac{d}{dt} = \frac{21}{2 \times 0.21} = \frac{1}{0.02}$$

$$\frac{d}{dt} = - \frac{4.5 \times 10^2}{2 \times 0.21} = - \frac{1.07 \times 10^3}{0.42}$$

$$\frac{d}{dt} = - \frac{2.5 \times 10^3}{2 \times 0.21} = - \frac{5.95 \times 10^3}{0.42}$$

$$\frac{d}{dt} = - \frac{1.21}{2 \times 0.21} = - \frac{2.83}{0.42}$$

$$dT = - \frac{2.2 \times 10^3}{2 \times 0.21} \cdot dy = - \frac{5.24 \times 10^3}{0.42}$$

$$223 \quad dT = - \frac{2.2 \times 10^3}{2 \times 0.21}$$

$$= (2) \quad \dots \dots \dots$$

1. $\frac{1}{x^2} = x^{-2}$

2. $\frac{1}{x^3} = x^{-3}$

3. $\frac{1}{x^4} = x^{-4}$

4. $\frac{1}{x^5} = x^{-5}$

5. $\frac{1}{x^6} = x^{-6}$

6. $\frac{1}{x^7} = x^{-7}$

7. $\frac{1}{x^8} = x^{-8}$

8. $\frac{1}{x^9} = x^{-9}$

9. $\frac{1}{x^{10}} = x^{-10}$

10. $\frac{1}{x^{11}} = x^{-11}$

11. $\frac{1}{x^{12}} = x^{-12}$

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$L = 3 \dots$
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$$L = \frac{1}{2} \pi$$

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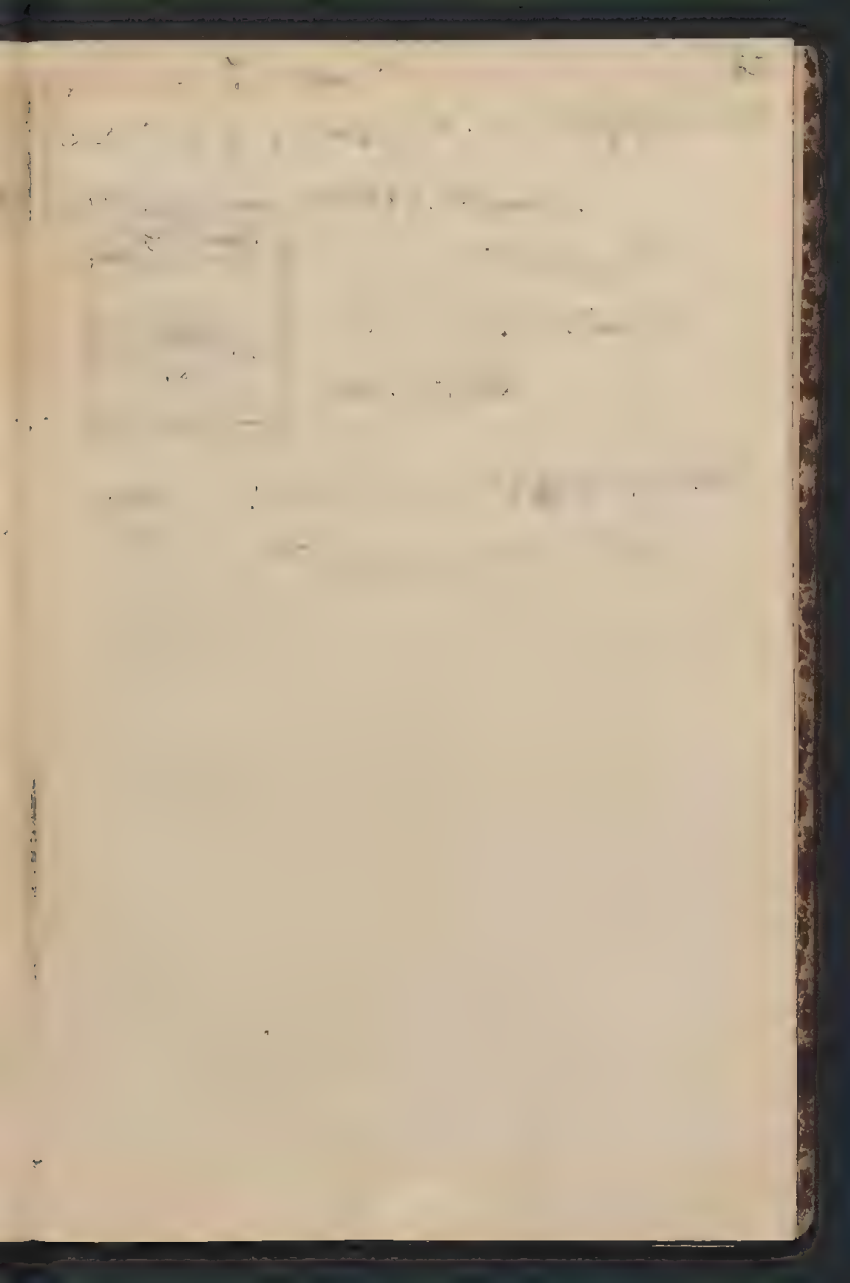
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$\frac{d}{dt} \left(\frac{1}{2} m v^2 \right) = \frac{d}{dt} \left(\frac{1}{2} m \dot{x}^2 \right)$
 $= m \dot{x} \ddot{x}$
 $= m \dot{x} a$
 $= m \dot{x} \frac{d^2 x}{dt^2}$

$$= \frac{d}{dt} \left(\frac{1}{2} m v^2 \right)$$

$$= \frac{d}{dt} \left(\frac{1}{2} m \dot{x}^2 \right)$$

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$$f(x) = \frac{1}{x}$$

Page 11

$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$

$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$

$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$

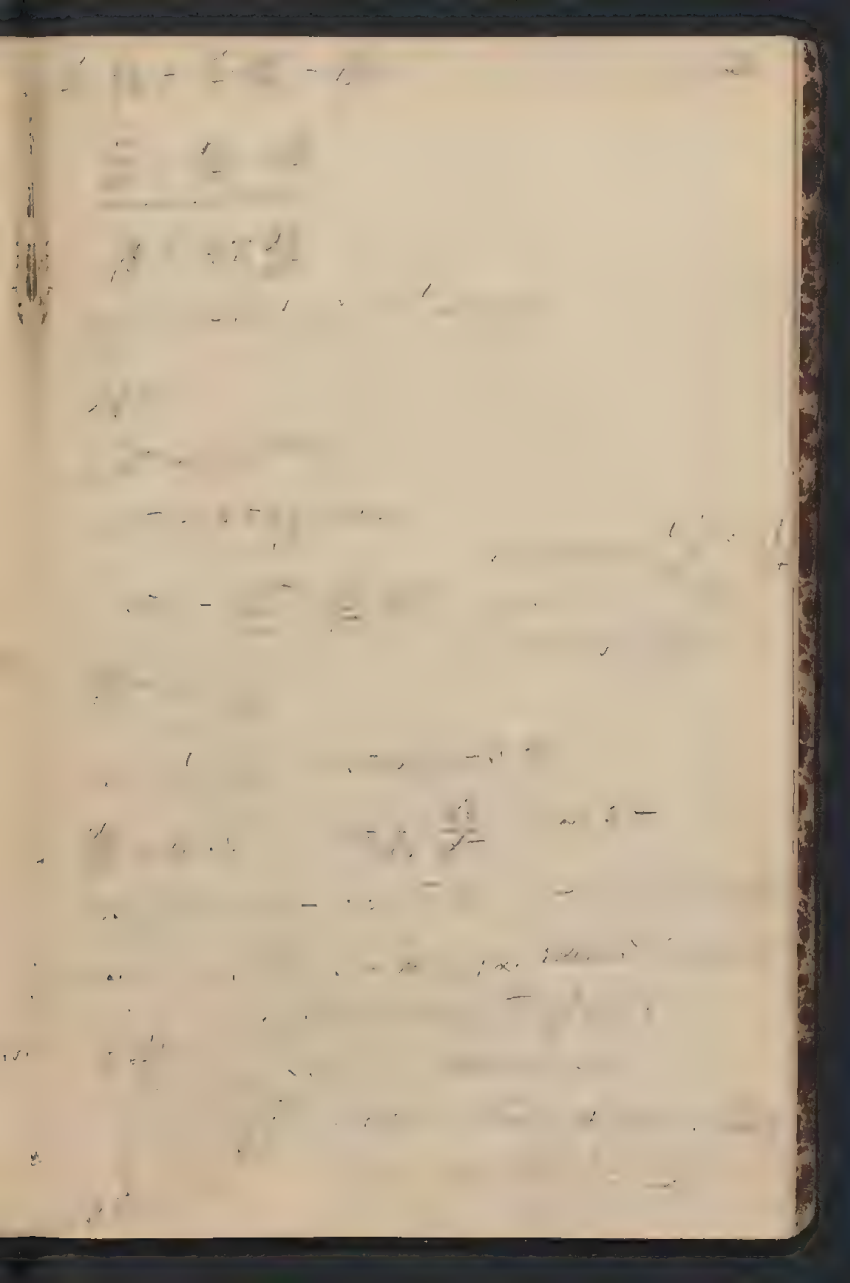
$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$

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$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$

$$f(x) = \frac{1}{x} \quad A = \frac{1}{x^2}$$



1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

2. In the second part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

3. The third part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

4. In the fourth part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

5. The fifth part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

6. In the sixth part, we shall consider the question of the influence of the external magnetic field on the structure of the atom.

7. The seventh part of the paper is devoted to a discussion of the question of the influence of the external electric field on the structure of the atom.

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Fourth section of handwritten text, possibly containing a list or numbered items.

Fifth section of handwritten text at the bottom of the page.

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$\sim R \cdot D$

$\dots + R \cdot D \cdot D = \dots$

$\dots - \frac{1}{2} \dots$

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dk-

$$x = \frac{1}{2} + \frac{1}{2} \sqrt{1 - 4a}$$

Let $f(x) = \frac{1}{x^2} = x^{-2}$

$$\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$$

$$f'(x) = -\frac{2}{x^3}$$

$$f'(1) = -\frac{2}{1^3} = -2$$

$$f'(2) = -\frac{2}{2^3} = -\frac{1}{2}$$

$$f'(3) = -\frac{2}{3^3} = -\frac{2}{27}$$

$$f'(4) = -\frac{2}{4^3} = -\frac{1}{8}$$

$$f'(5) = -\frac{2}{5^3} = -\frac{2}{125}$$

$$f'(6) = -\frac{2}{6^3} = -\frac{1}{108}$$

$$f'(7) = -\frac{2}{7^3} = -\frac{2}{343}$$

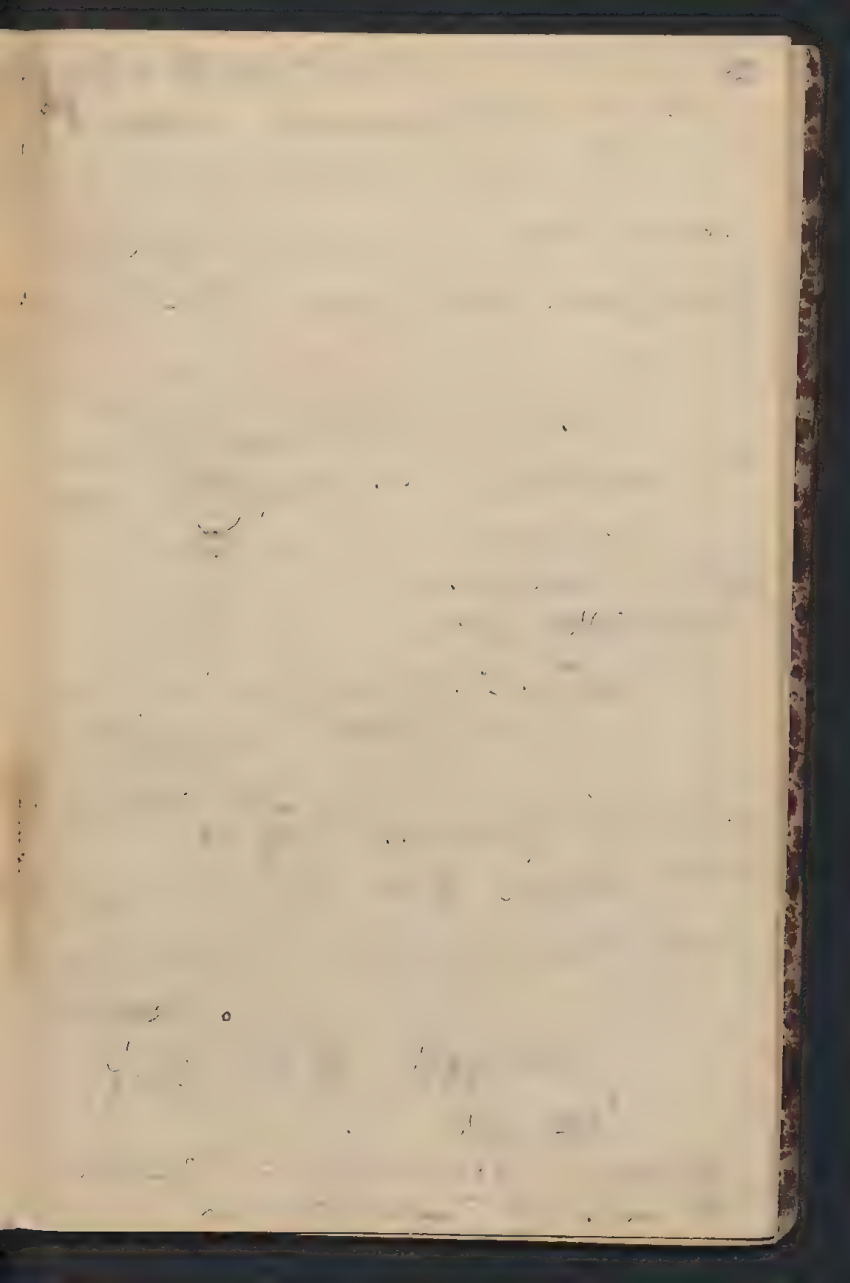
$$f'(8) = -\frac{2}{8^3} = -\frac{1}{256}$$

$$f'(9) = -\frac{2}{9^3} = -\frac{2}{729}$$

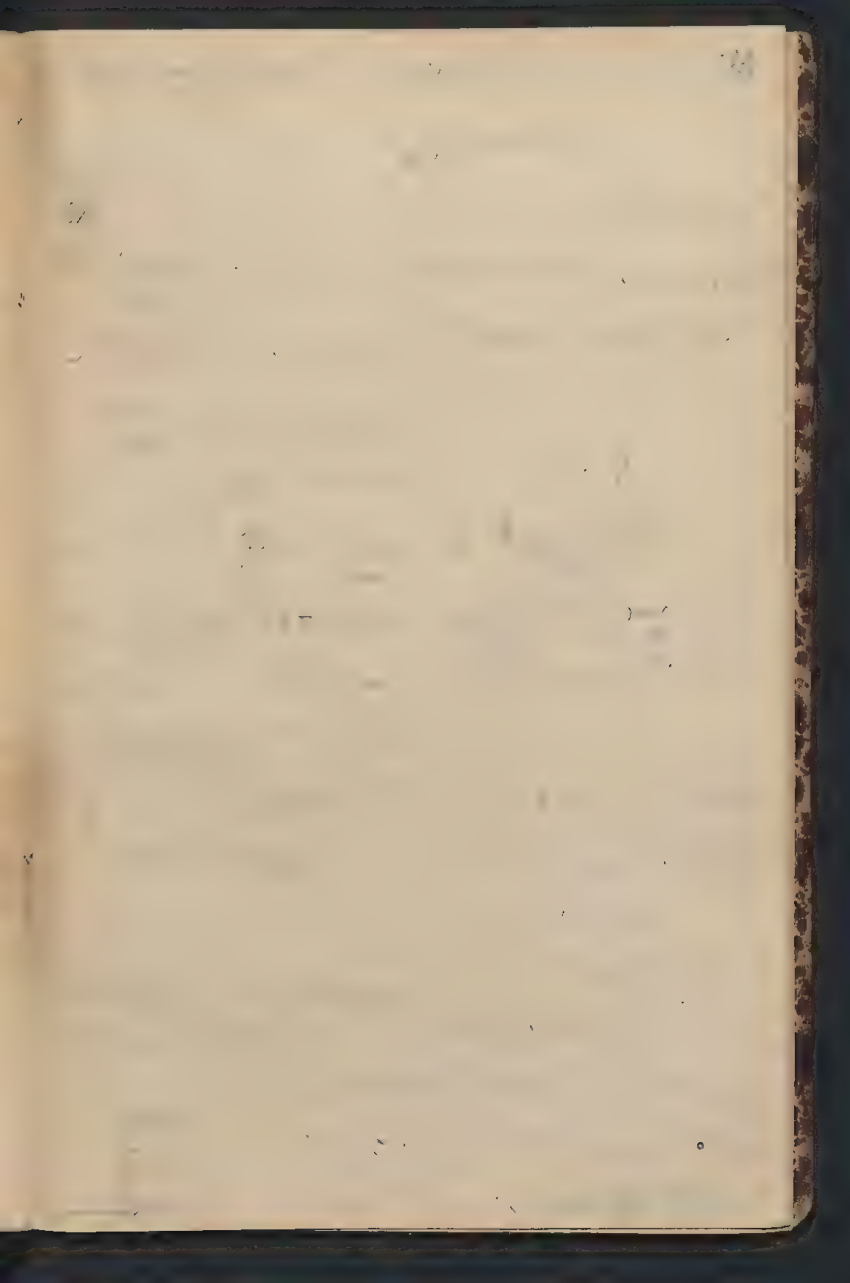
$$f'(10) = -\frac{2}{10^3} = -\frac{1}{500}$$

$$f'(11) = -\frac{2}{11^3} = -\frac{2}{1331}$$

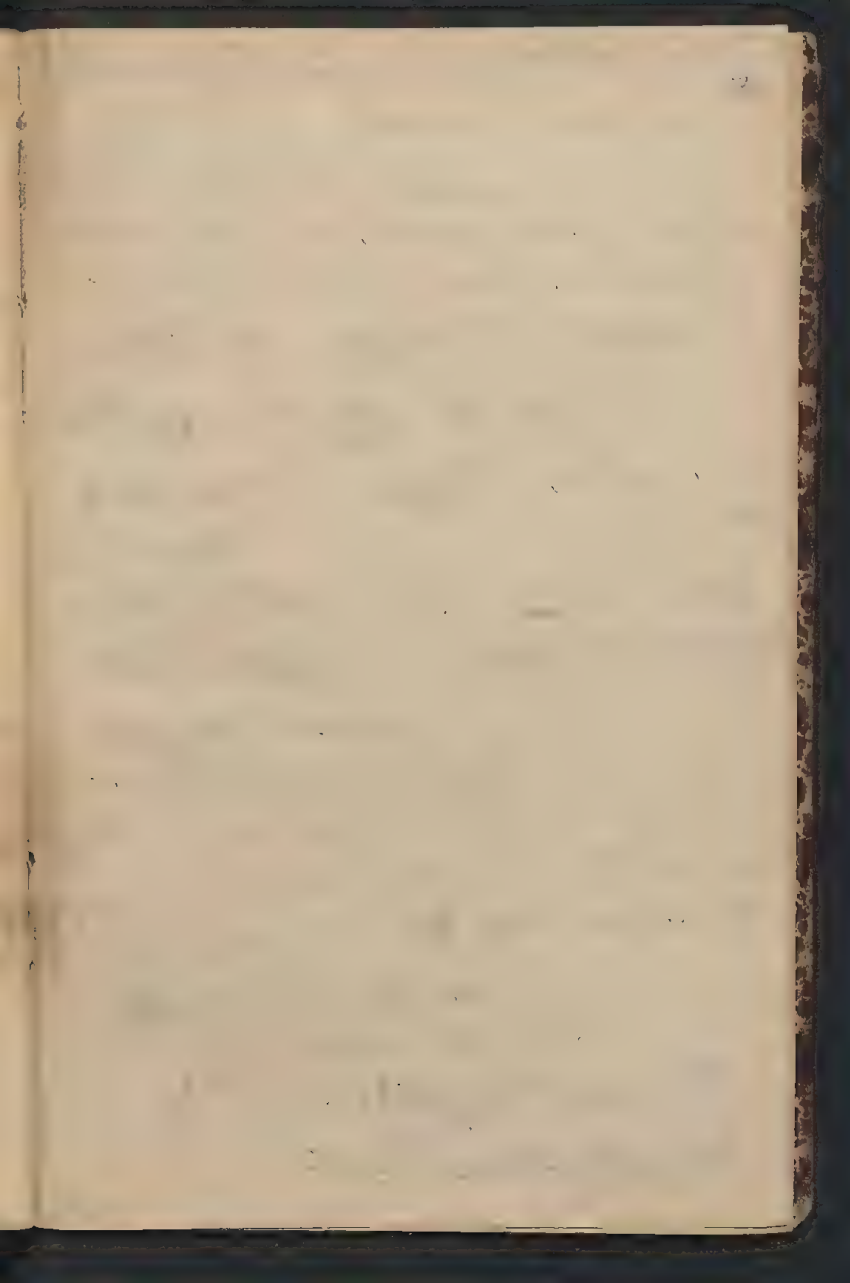
$$f'(12) = -\frac{2}{12^3} = -\frac{1}{360}$$

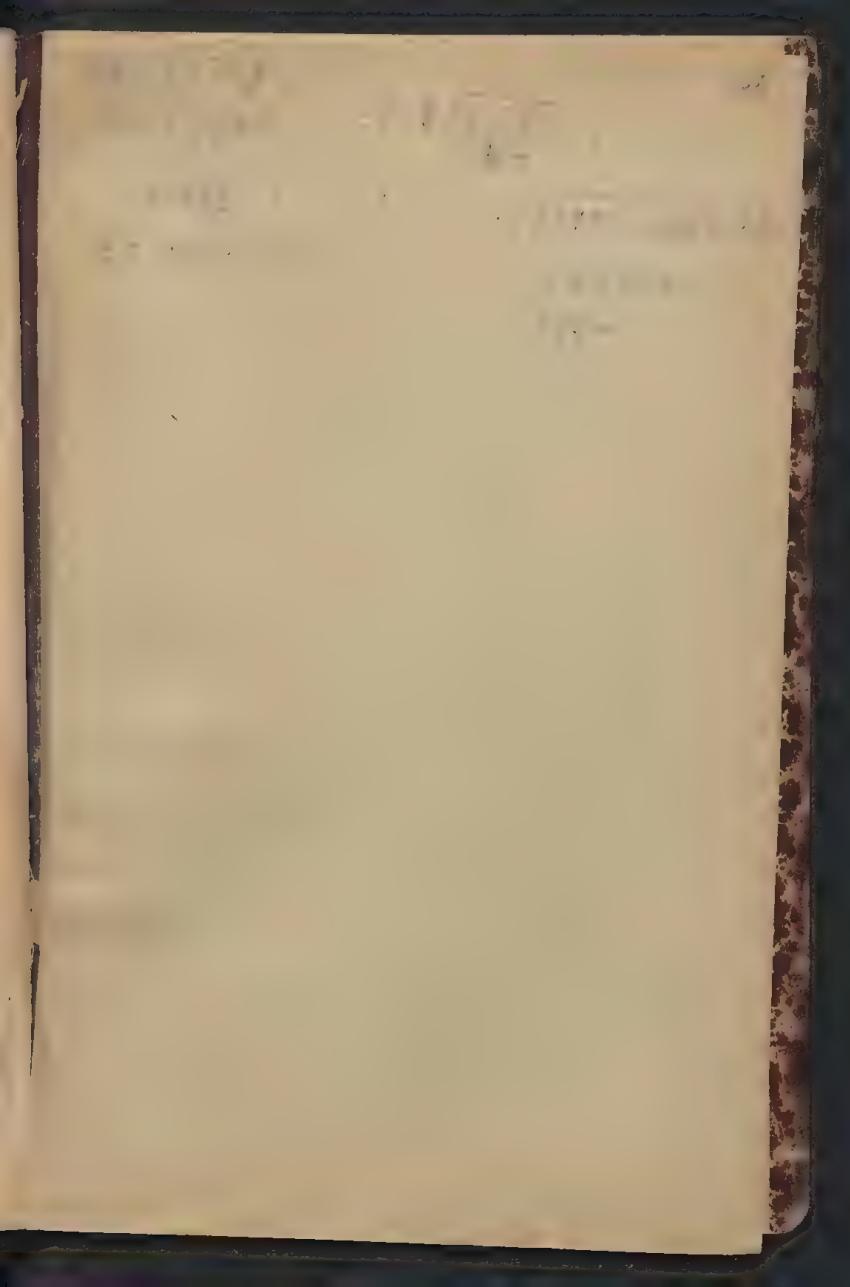


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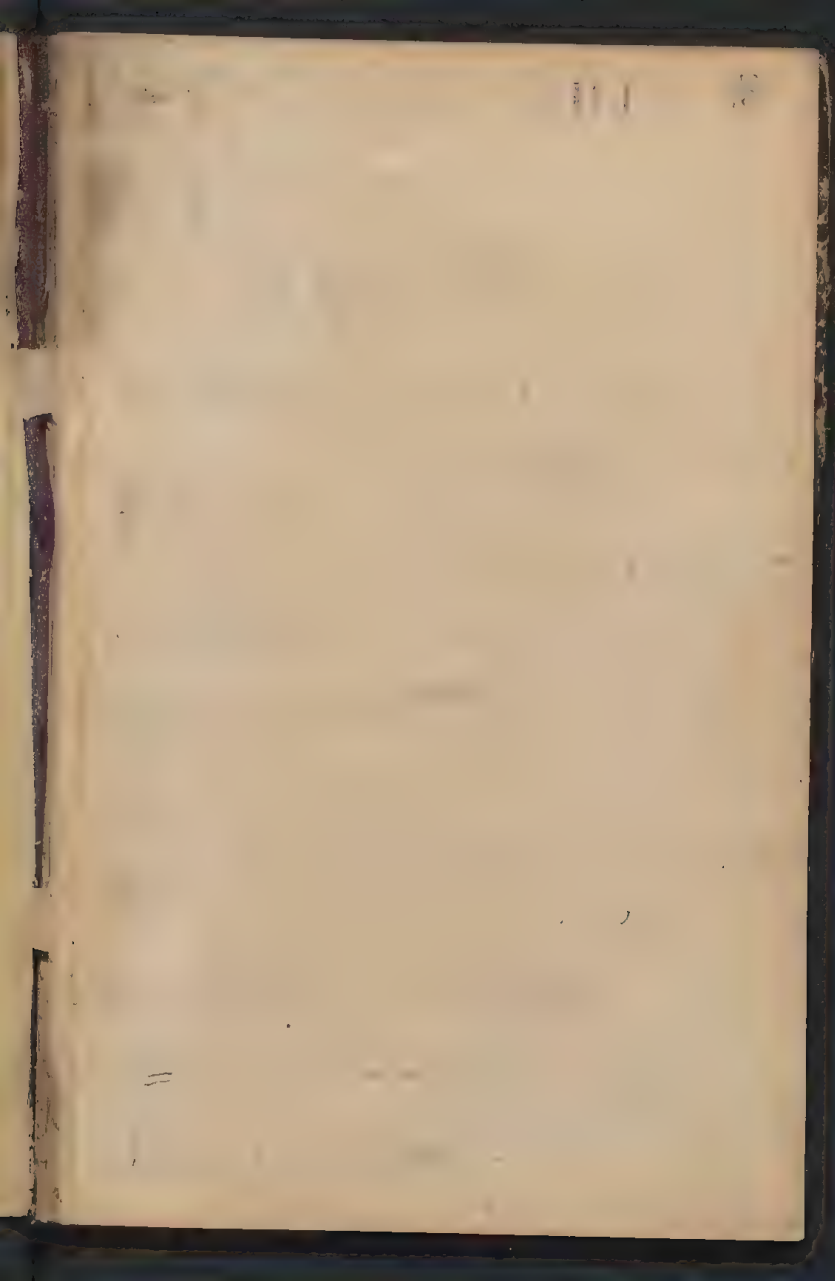


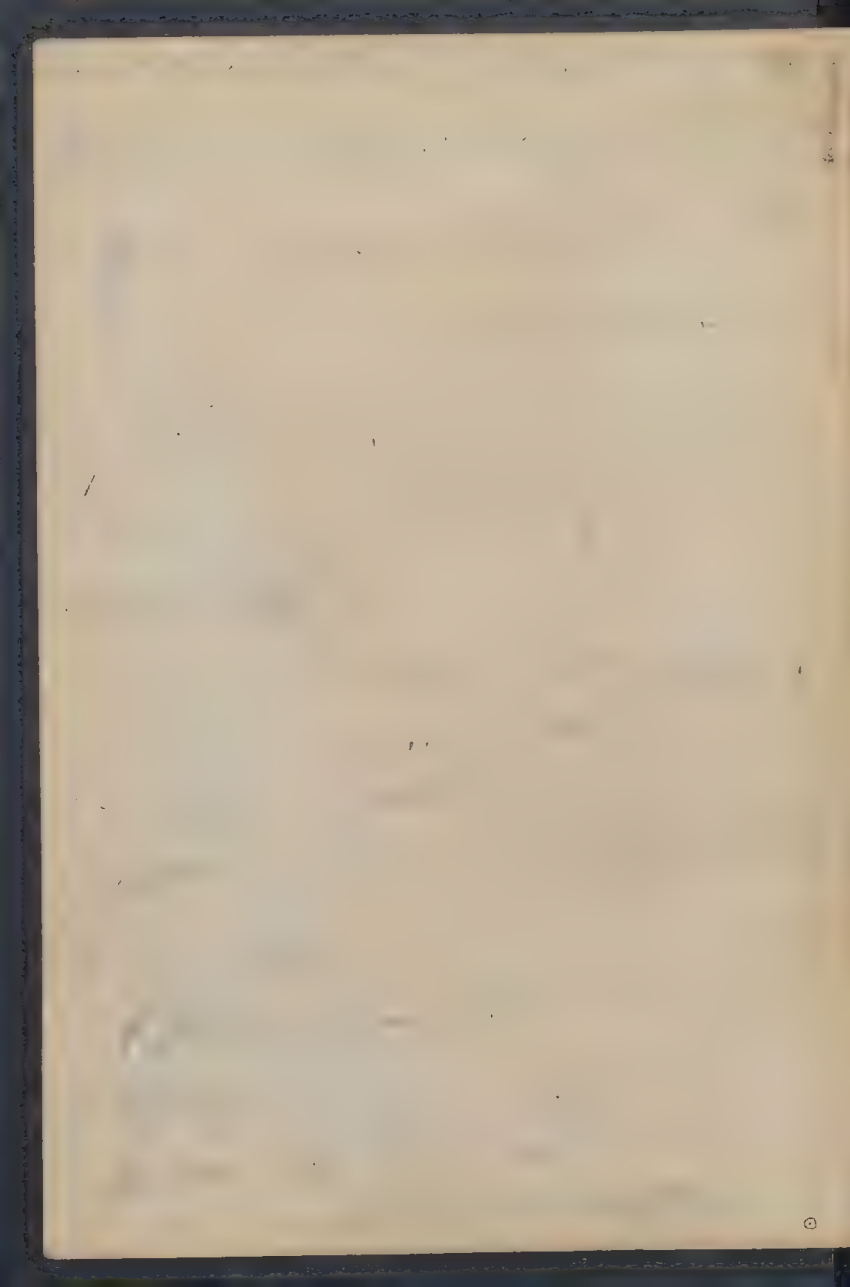


Dr. Josef Stefan 77 III.
Ausgewählte Capitel aus der
Optik und Wärmelehre.

II. S. 91. Rsmoluchowski

P. PULLY, IV. KAROLINENG. 23





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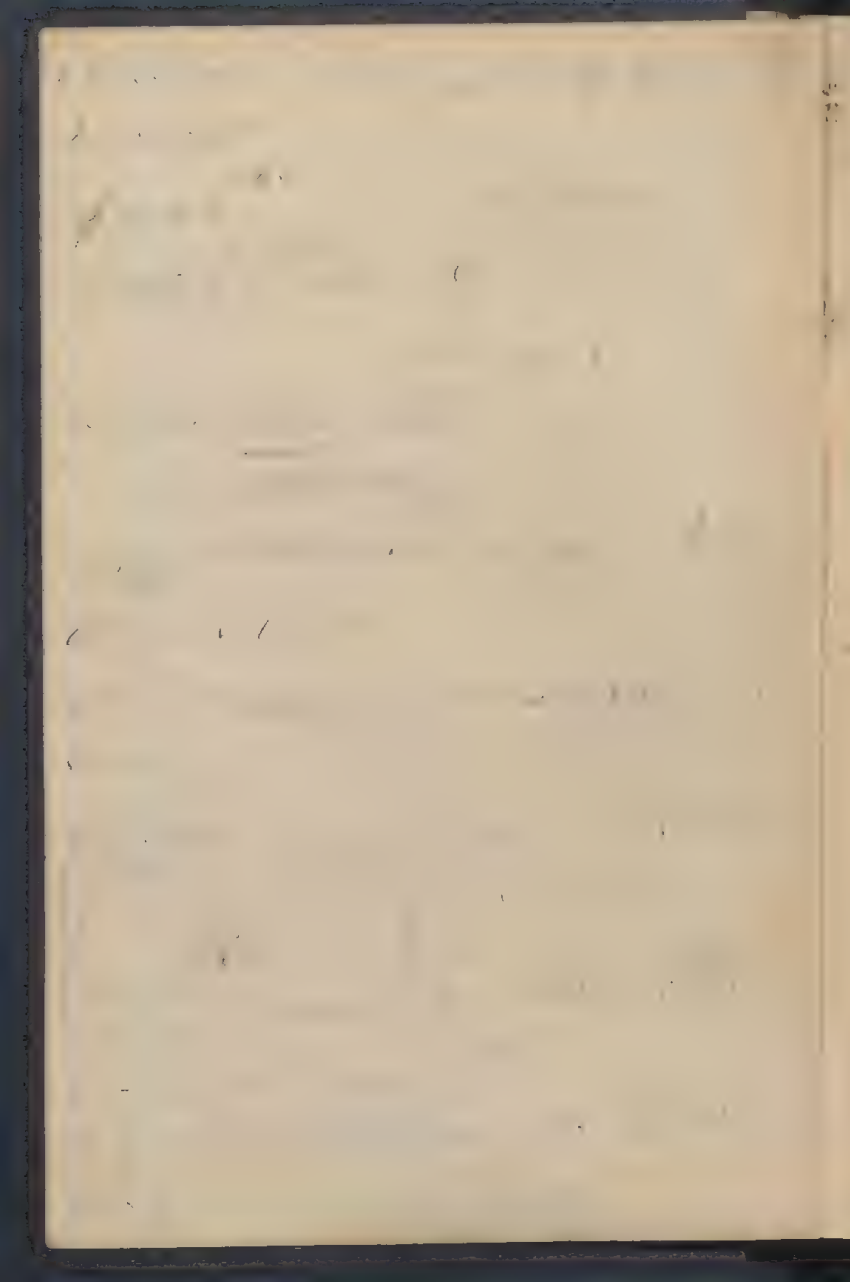
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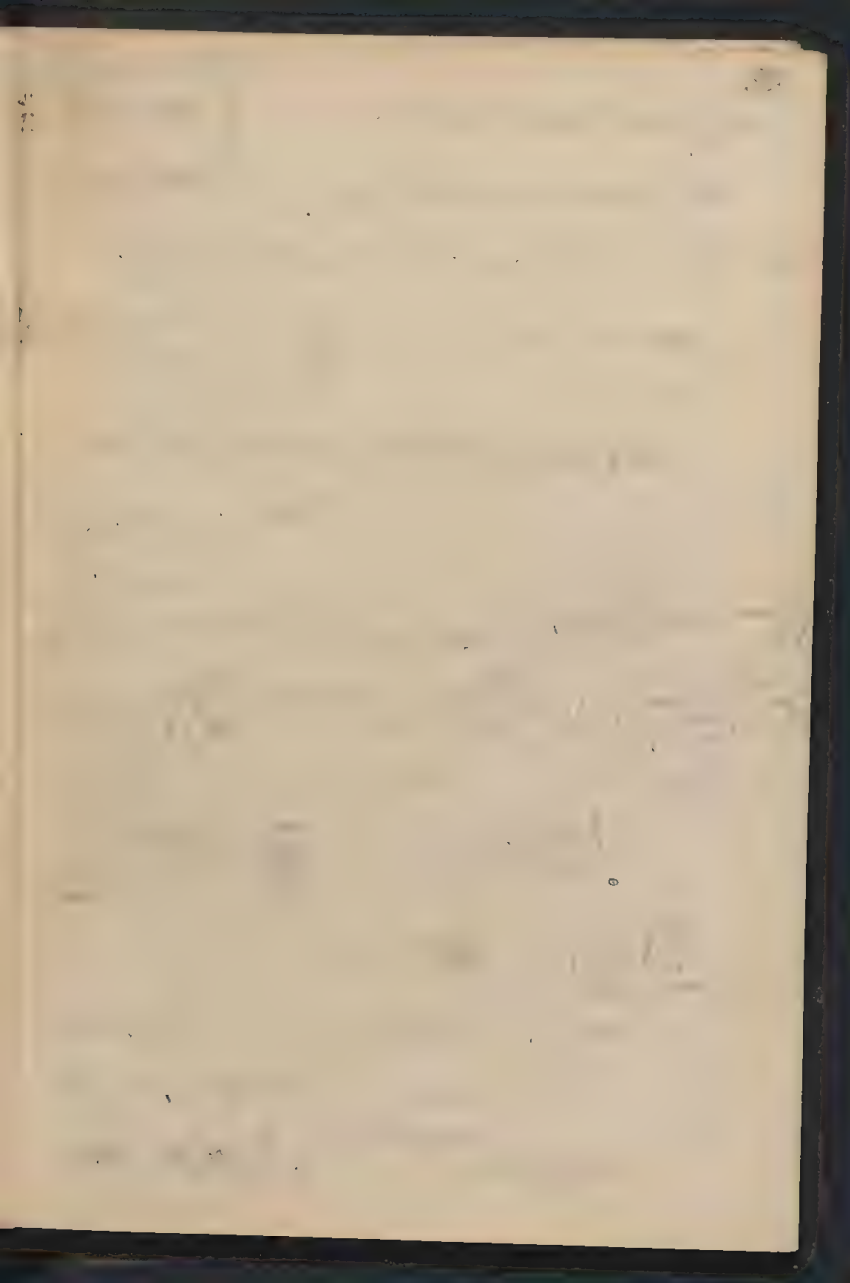
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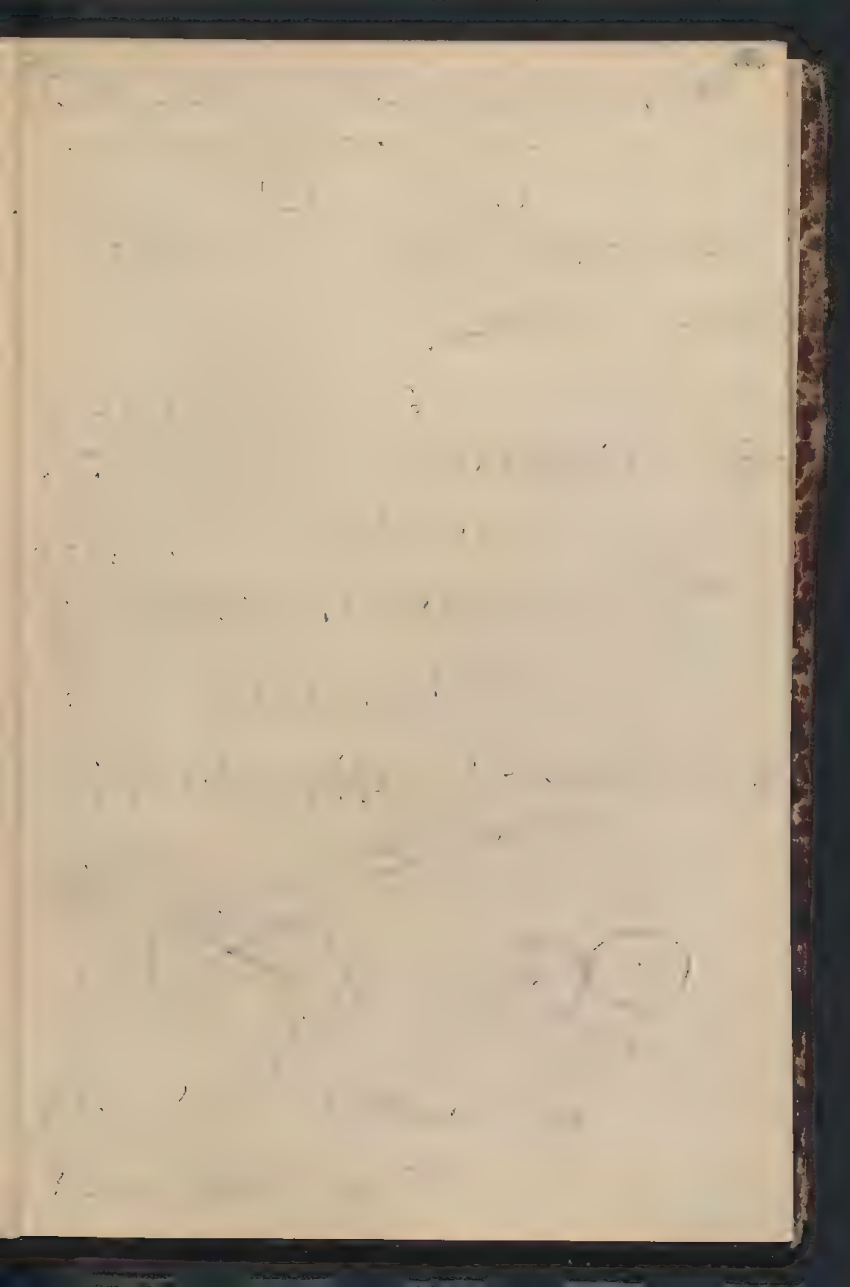
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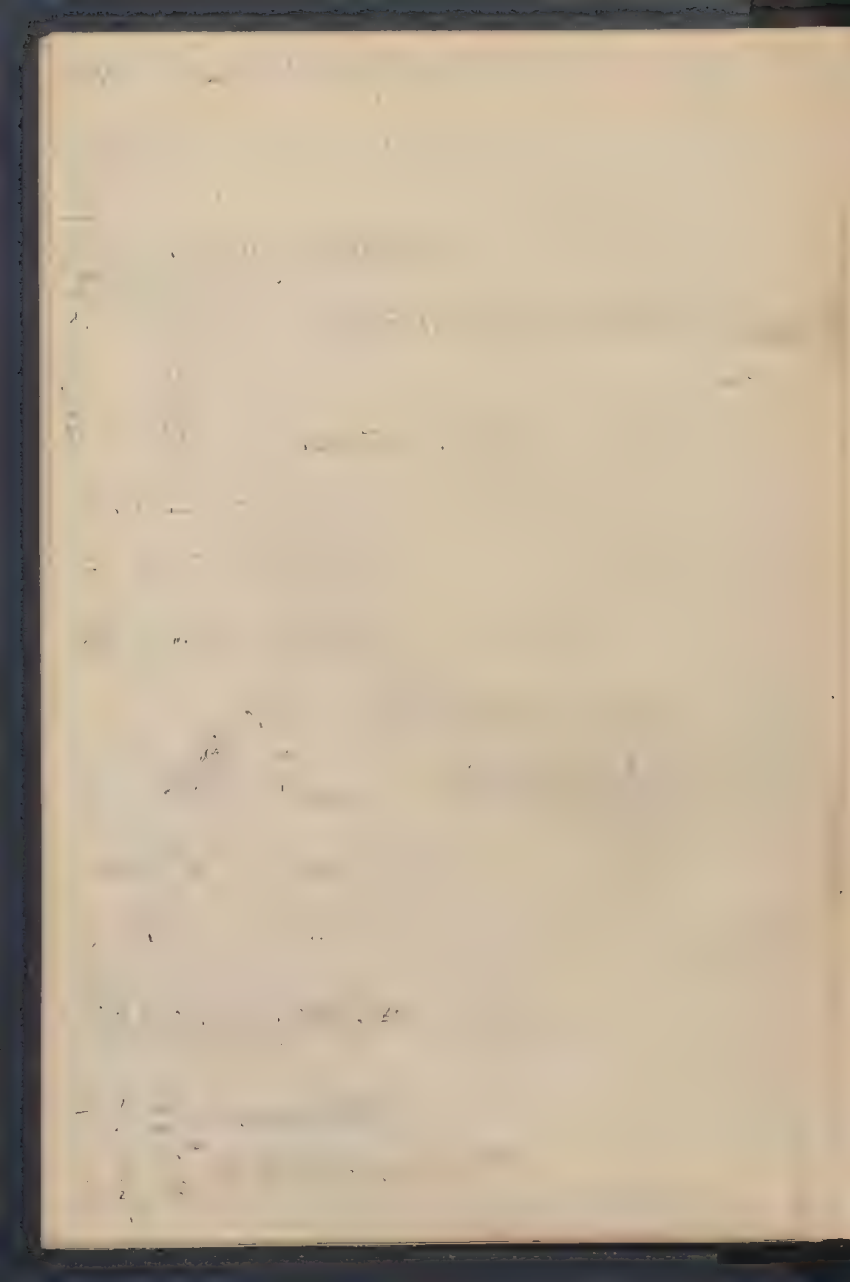
1. $\frac{1}{2} \frac{d}{dt} \left(\frac{1}{r^2} \right) = -\frac{1}{r^3} \frac{dr}{dt}$

2. $\frac{d}{dt} \left(\frac{1}{r^2} \right) = -\frac{2}{r^3} \frac{dr}{dt}$

3. $\frac{d}{dt} \left(\frac{1}{r^2} \right) = -\frac{2}{r^3} \frac{dr}{dt}$

4. $\frac{d}{dt} \left(\frac{1}{r^2} \right) = -\frac{2}{r^3} \frac{dr}{dt}$



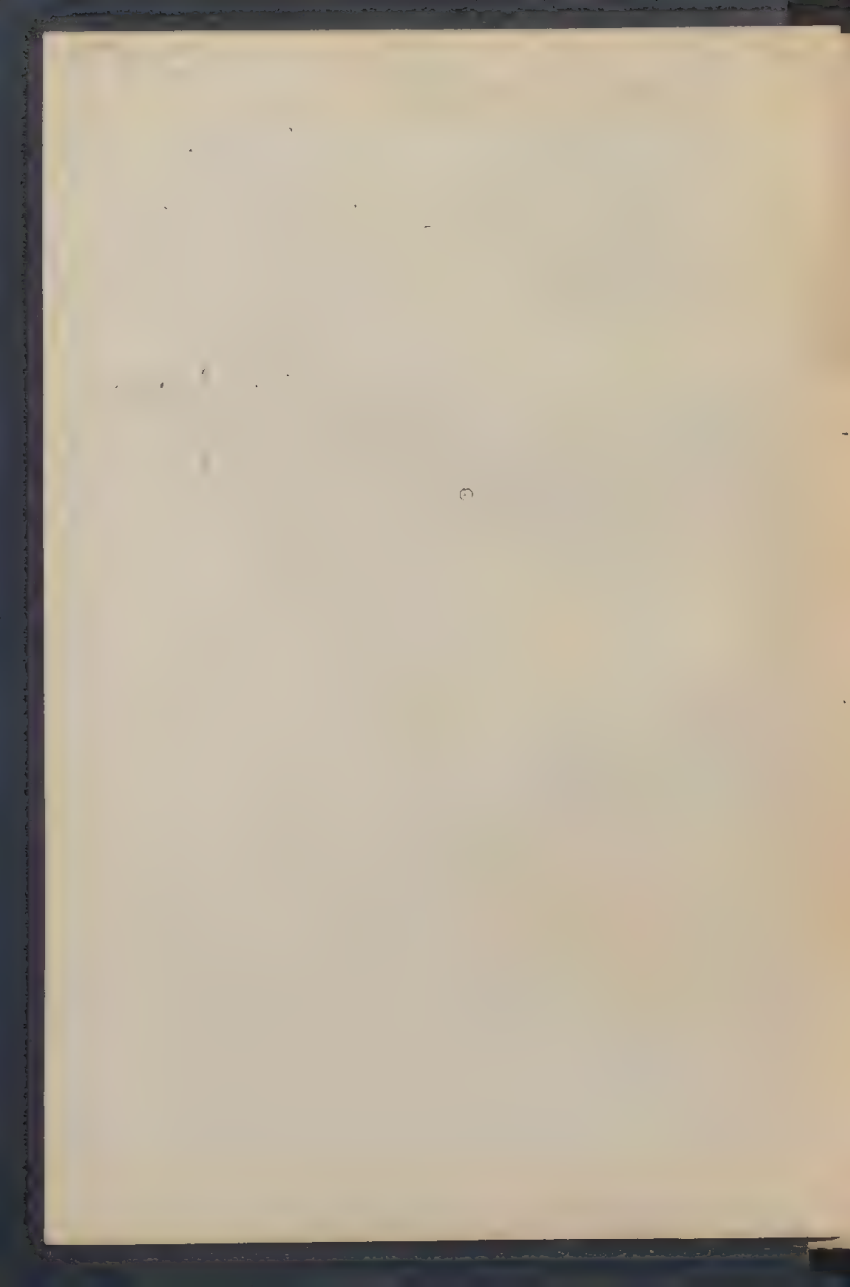


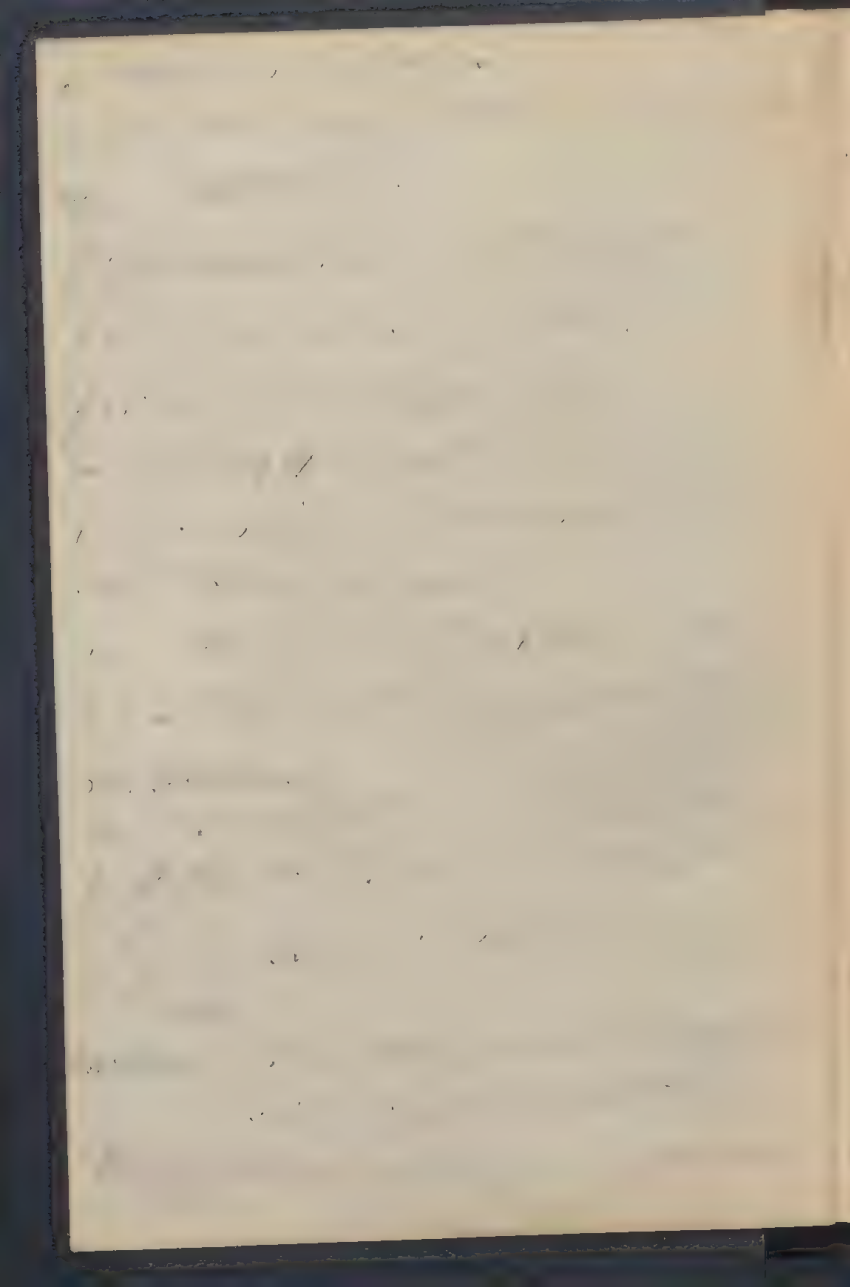


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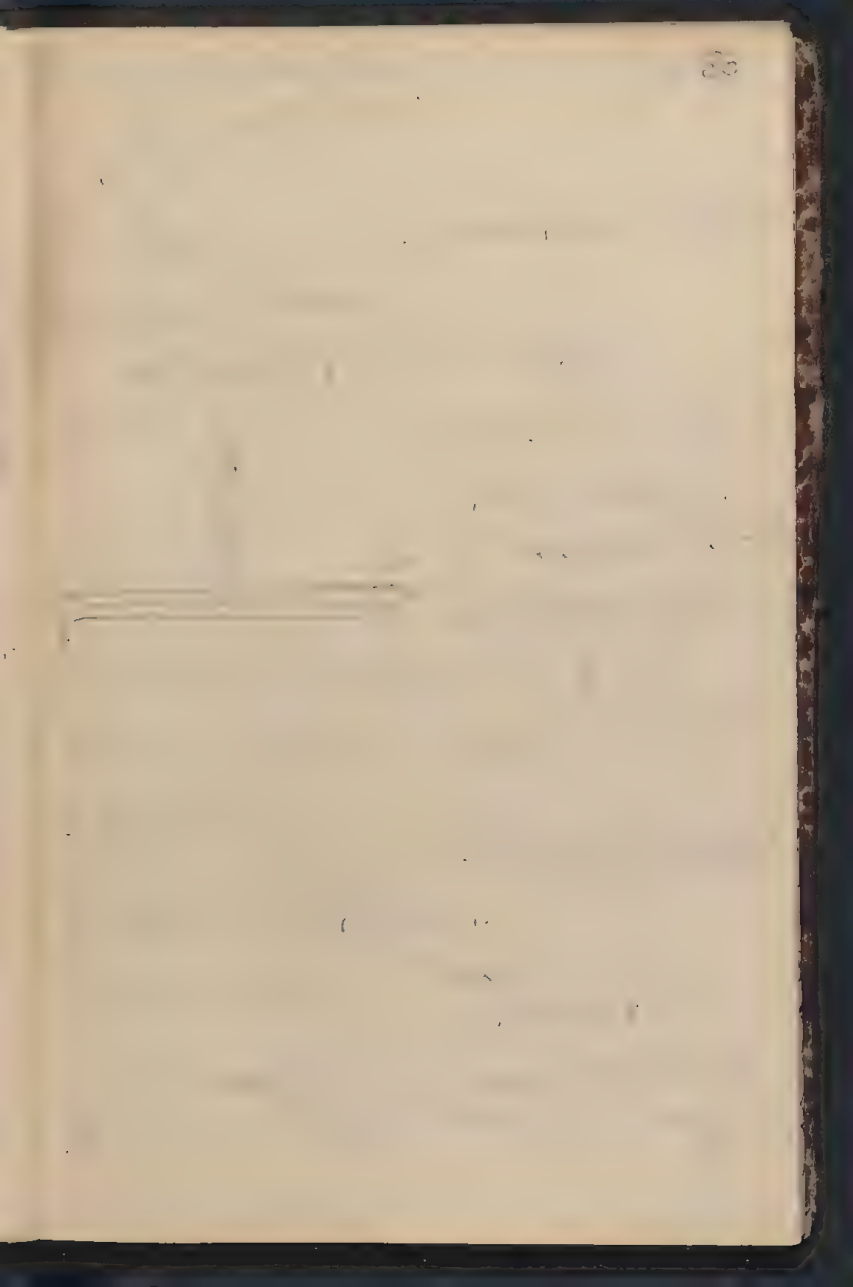
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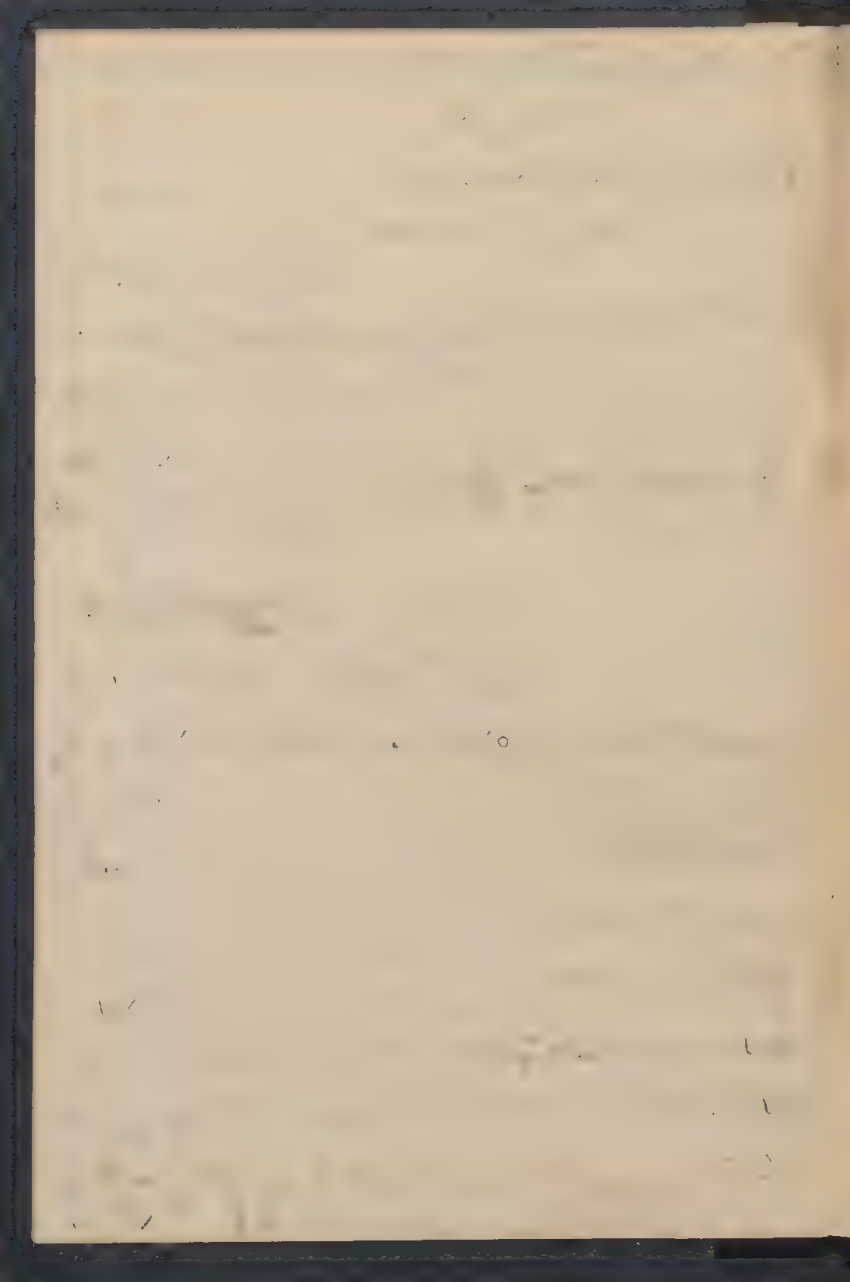
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910 920 930 940 950 960 970 980 990 1000

1010 1020 1030 1040 1050 1060 1070 1080 1090 1100

1110 1120 1130 1140 1150 1160 1170 1180 1190 1200





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$$\mu = 80.2$$

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